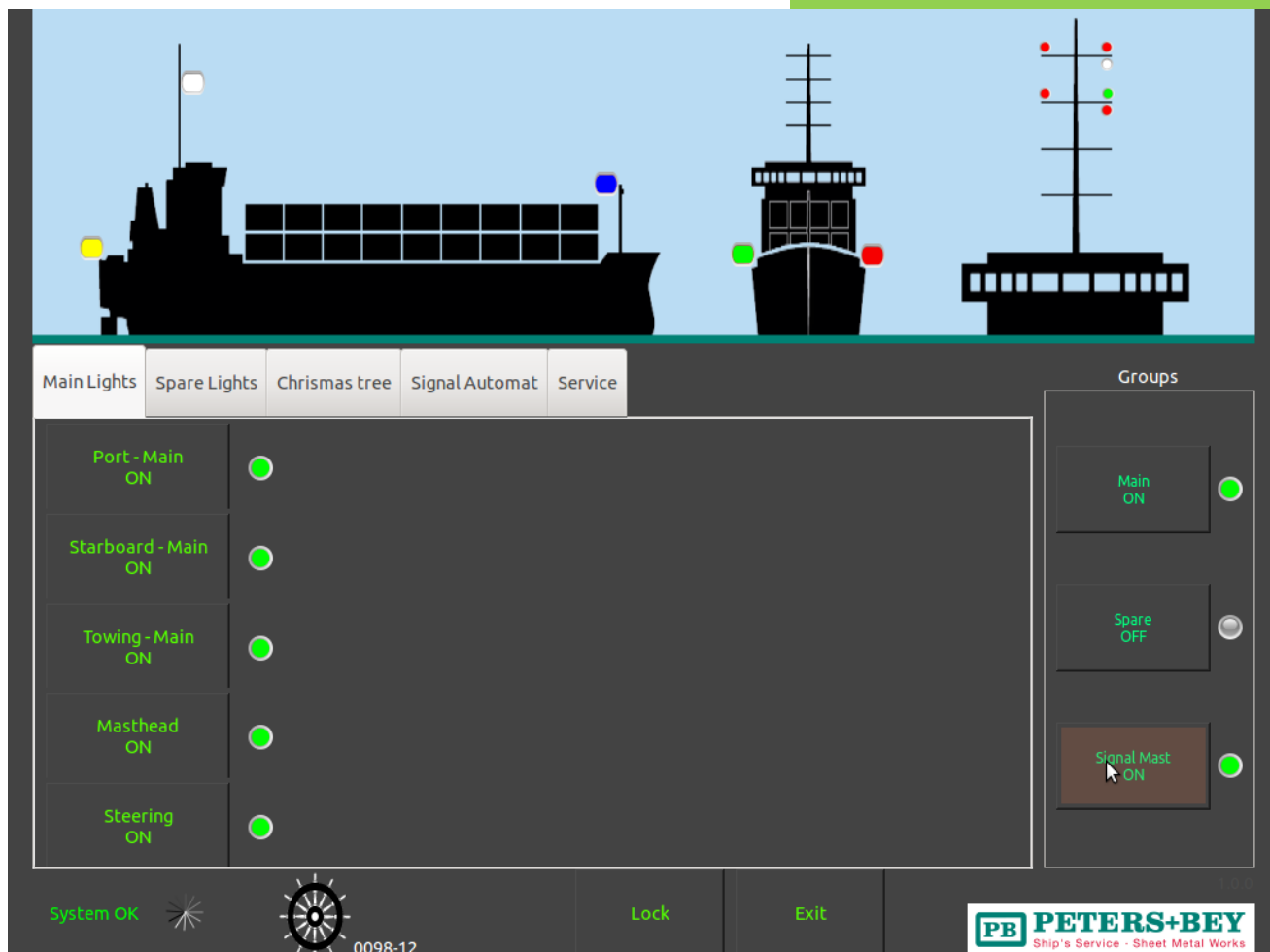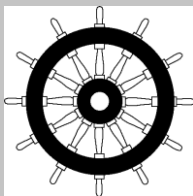# PETERS+BEY
Ship's Service · Sheet Metal Works

PB-NLCP-SA – Operation Manual Navigation Light / Signal Automat Monitoring and Control System Touch screen Monitor Version

GL and MED Approval

Thomas Peters

Peters + Bey GmbH – Hamburg

Revision: 02

Content

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1.   Design

The system consists according to standard of the following parts:

1. **Control Unit**
   Type: PB-NLCP
   for maximal 8 Basis Measuring Modules
   12/24/115/230 Volt
   PB - Art.No.: 7800100

2. **Basis Measuring Module**
   Type: PB-MM-Basis
   12/24/115/230 Volt
   for maximal 8 single lanterns
   PB - Art.No.: 7800101

3. **Measuring Card**
   Type: PB-MM
   115-230 AC
   for 2 electrical items
   PB - Art.No.: 7800102

4. **Measuring Card**
   Type: PB-MM
   10-30V DC Volt
   for 2 electrical items
   PB - Art.No.: 7800103

5. **Touch screen Monitor - 13,3" - TFT**
   Type: HD 13T21 MMC-E1C-PABA
   Manufacture: Hatteland
   IntelNM10 Atom 1.66GHz 1GBRAM
   8GBSSD-M OSNone 2xDC
   24V - 400 cd/m² - 1280x800
   according to EN60945
   PB - Art.No.: 7800104

6. **Connection Cable**
   L = 2,0m
   PB - Art.No.: 7800110

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The minimal configuration comprises a Control unit, one Basic Measuring Module and Measuring Card for 2 electrical items and a Touch screen Monitor.

Depending on requirements, the number of electrical items can be extended to 64 electrical items. There for you need 8 Basic Measuring Modules 8 electrical items each and 4 Measuring cards for each Basis Measuring Module. Each Measuring card can be used for maximum 2 electrical items.

The system also can be used without our Touch screen panel, if you have an existing control unit standard version with switches.

EMV secured according to the regulations of the EN60945. That is the reason why the construction of the Basis Measuring Module is completely closed.

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2. Function

2.1 Power supply

The system works on voltages common to vessels 10-30V DC and 115-230V AC.

The inputs are short-circuit proof and maintenance-free.

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2.2   Signal Automat

The Signal Automat is programmed to release automatically the manoevring and warning signals according to Rule 35 (a, b, c, e, g) of the COLREG 1972 and additionally the SOS distress signal.

Automatic and manual signal release:

- Sound and light signals
- Ready for connection of one or two horns, one maneuver signal lamp
- Maintenance free System
- Self-describing pushbuttons

COLREG 1972 - Rule 35 Sound Signals in Restricted Visibility
In or near an area of restricted visibility, whether by day or night, whistle signals shall
be used.

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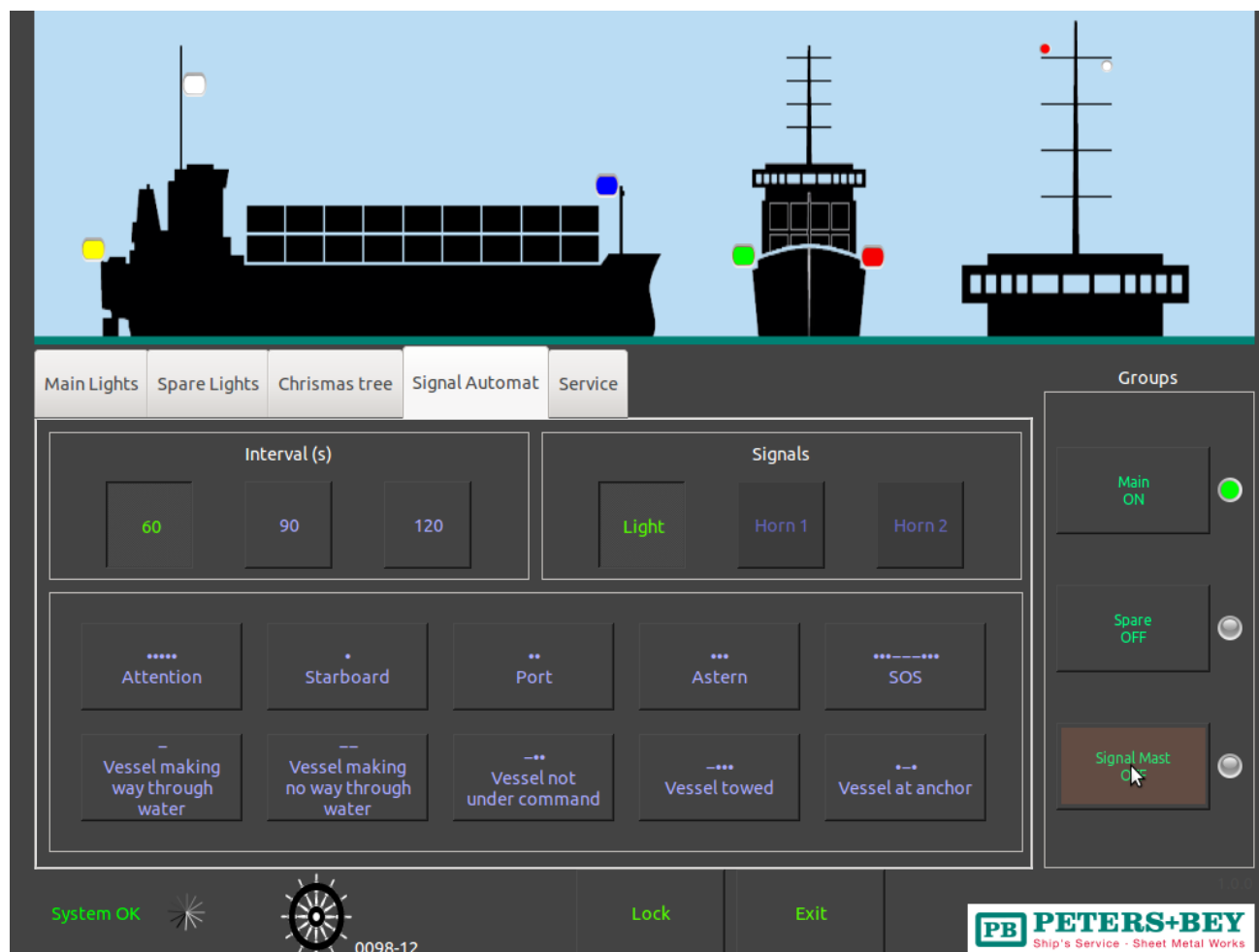
Characteristics of Automatic Signals

- Attention
- Starboard
- Port
- Astern
- SOS Distress Signal
- Vessel making way through water
- Vessel making no way through water
- Vessel not under command
- Vessel towed
- Vessel at anchor

Lanterns and Horns which are configured to the Signal Automat will be not controlled through the panel during operation.
The check of the Light will be made during the [Check all Lights] **procedure.**

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3. Programming / Configuration

The layout on the screen can be programmed and/or changed individually by the customer.

The Code words will be listed on an extra page in the manual.

3.1 Automatic

To come in the configuration modus you have to go following way.

Press Push bottom | Service

Press Push bottom | Configuration Tool

Press Push bottom | Automatic

Following screen you will see.

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3.1.1 Launch Detection

The Launch Detection is to calibrate all electrical items which are installed on the Measuring units. It is necessary to do this calibration after you have installed all items the first time. This Detection will take 2 minutes. The system will turn on all electrical items and measure the existing power consumption of all items. After the calibration everything will shut off.

Flashlight (Dangerous cargo, Fast ferry or Huge vessel) will be not able to detect.
Please make a visual check of these lights. You only able to turn the on and off through the panel. Lights which you program in the flashing modus will be only checked during the "Check all Lights" modus. Detection during the normal operation is not possible.

You finish the Launch detection with the push bottom [Send]

3.1.2 Load File

This bottom is to lead up some extra files.

You finish the loading with the push bottom [Send]

3.1.3 Update Firmware

This bottom is to lead up a new Firmware. This is possible after you got the new Firmware via Network

You finish the loading with the push bottom [Send]

3.1.4 Save locally

This bottom is for saving the existing changes on the computer in a separate area.
It makes sence to use this field after you have installed and checked the complete system on board. You will be able to get back this version if something happened with the programming after changes. You will be always able to restore this version.

If you want to save something locally you press following push bottom [Save locally]

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You will see following screen
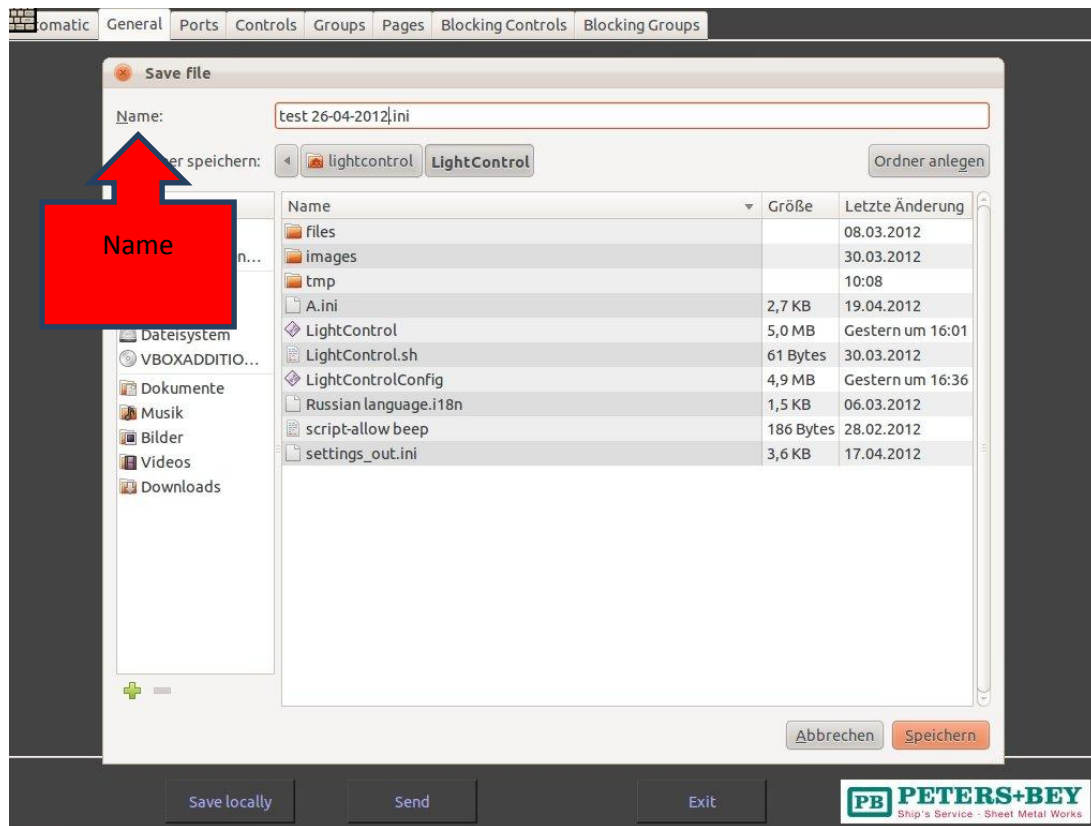
Give your file a name. It makes sence to give the actual date in the name, that you know what, when you save that file. Don´t move the .ini name, because it must be an .ini-data.

You finish this procedure with the push bottom   **Send**
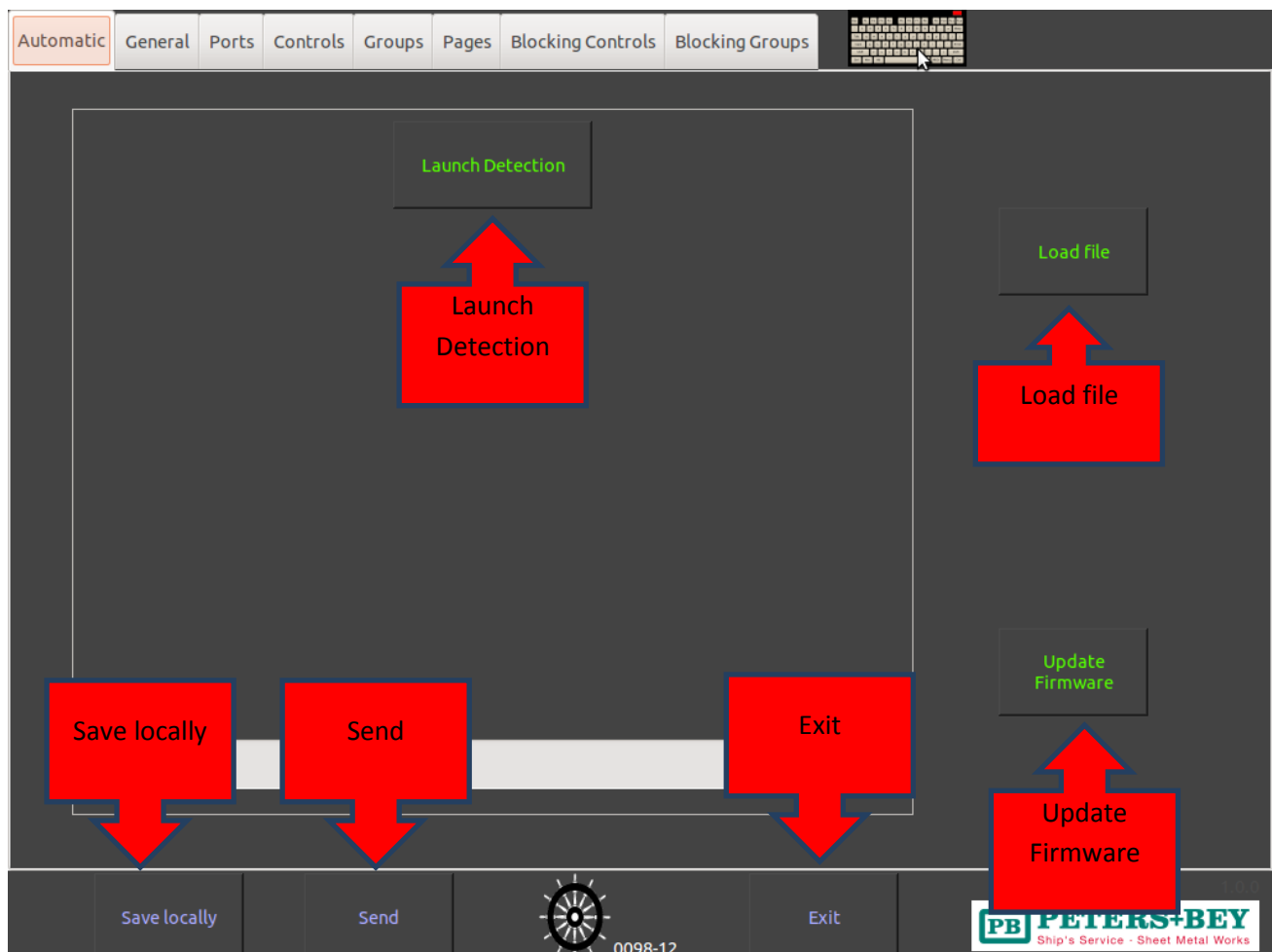
3.2   General

To come in the configuration modus you have to go following way.

Press Push bottom   **Service**

Press Push bottom   **Configuration Tool**

Press Push bottom   **General**

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In this area you are able to detect different items. Font sizes, language and the silhouettes for the screen.

Following screen you will see.

3.2.1 Control buttons font

In this field you are able to choose the size and the type of the font for the control buttons. If the size of the font is too big, you might not see all letters.

You finish the selection of the font with the push bottom **Send**

3.2.2 Group buttons font

In this field you are able to choose the size and the type of the font for the group buttons. If the size of the font is too big, you might not see all letters.

You finish the selection of the font with the push bottom **Send**

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3.2.3 Background image

In this field you are able to choose the Silhouette of the vessel for the touchscreen monitor.

Press Push bottom [**....**] on the right side of the Background image.

Than you will see following screen.
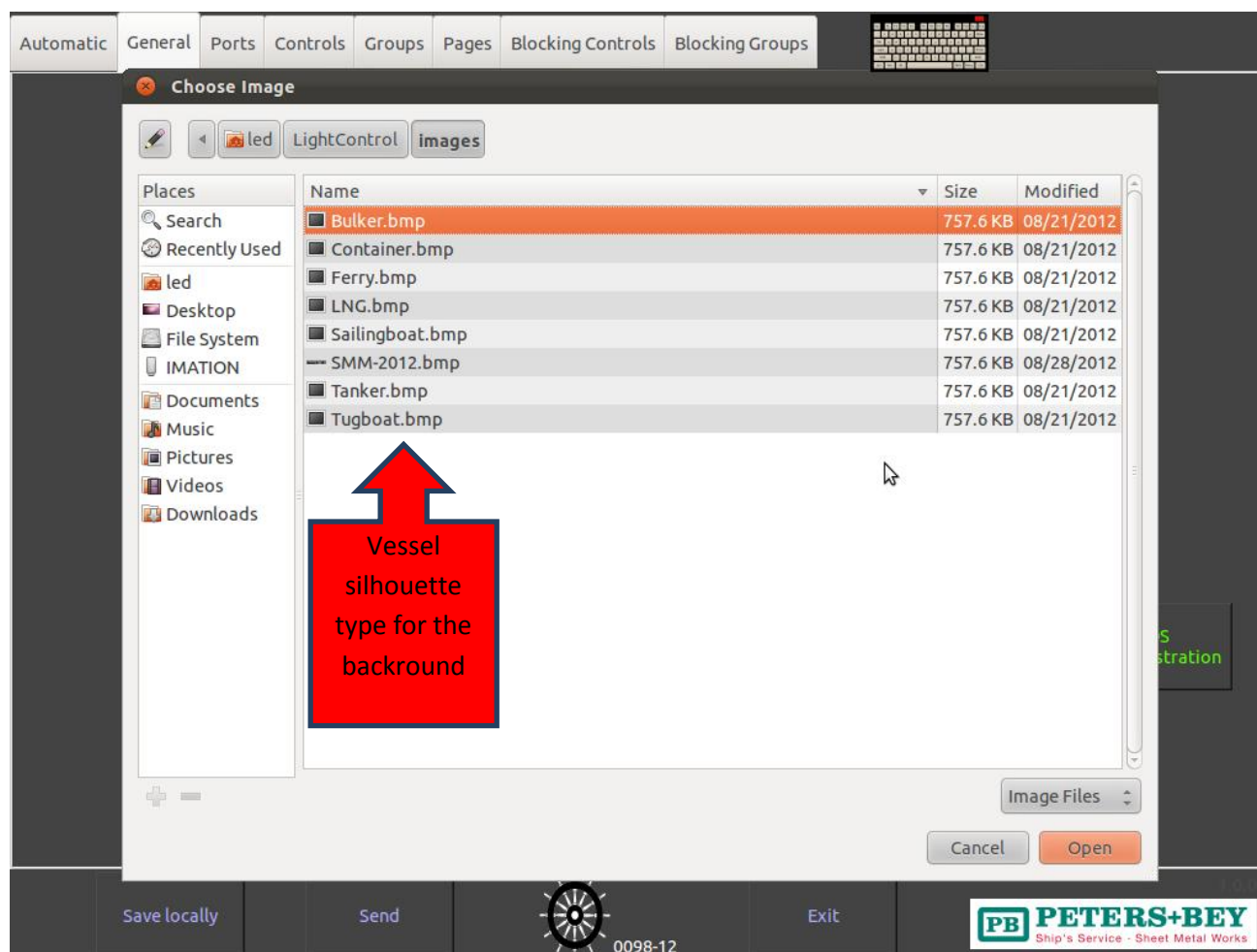
Choose the type of the vessel with pushing on the vessel type (Double push). The silhouettes can be selected from a list in the Database. At present the data base covers the following silhouettes:

- Container
- Bulker
- LNG
- Tanker
- Ferry
- Tugboat

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The Database will be growing in the future.

You finish the selection of the vessel type silhouette with the push bottom

Send

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3.2.4 Different language

If you want to have a different language behind each word on the touchscreen, you need an extra translation file. This translation file has to be created separate from Peters + Bey. All languages are possible if we get the translation from your side. Each word has to be translated.

Very important is that you use the translation file for different languages. Otherwise we will have a problem during the online service.

After that creation the translation file you have to set a hook in the "use translation file" Than you have to choose the language. In the future you will be able to choose between a couple of different languages.

You finish the different language choosing with the push bottom

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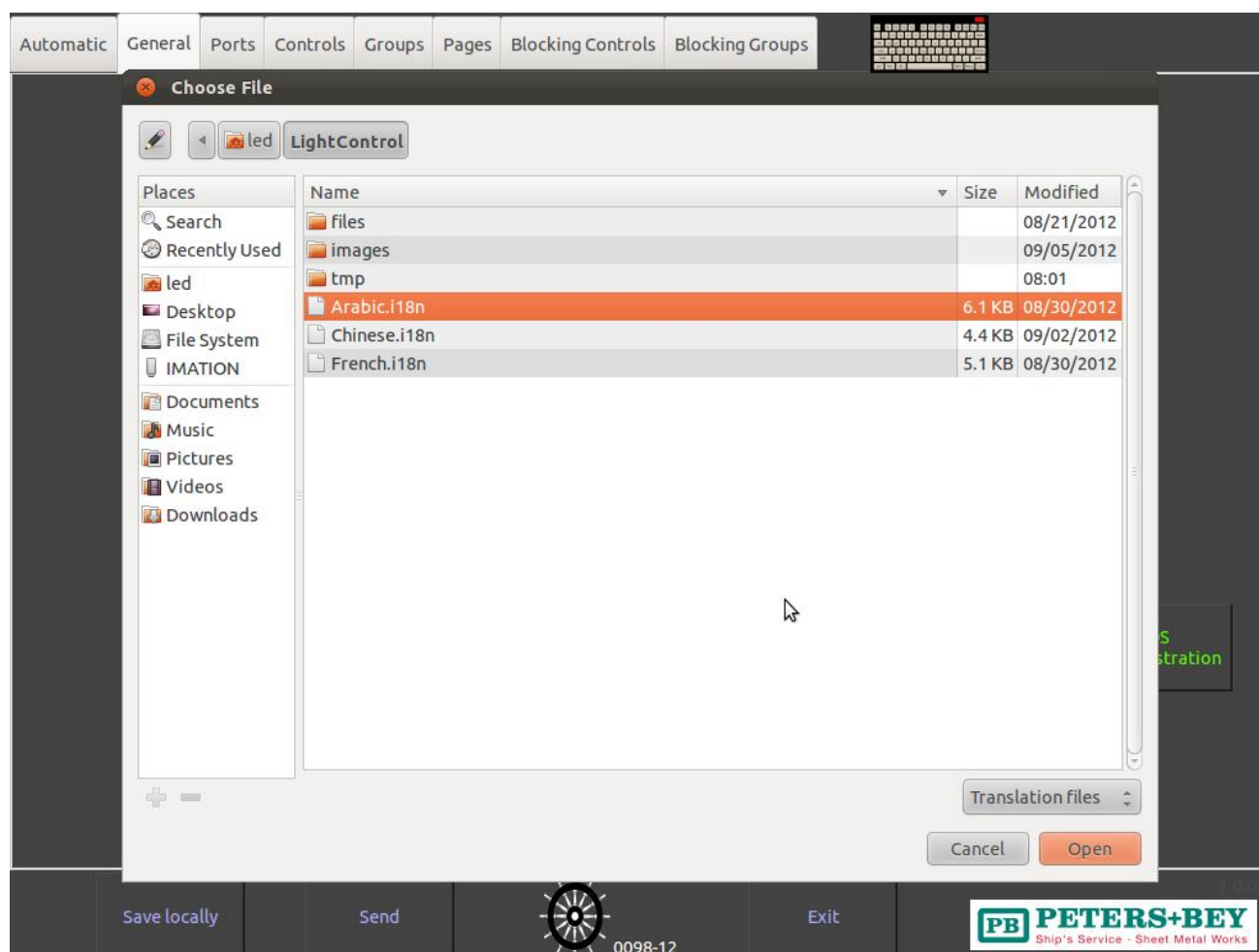
3.2.4.1 Translation File

For the translation it is necessary to translate all English words/text files in the foreign language.

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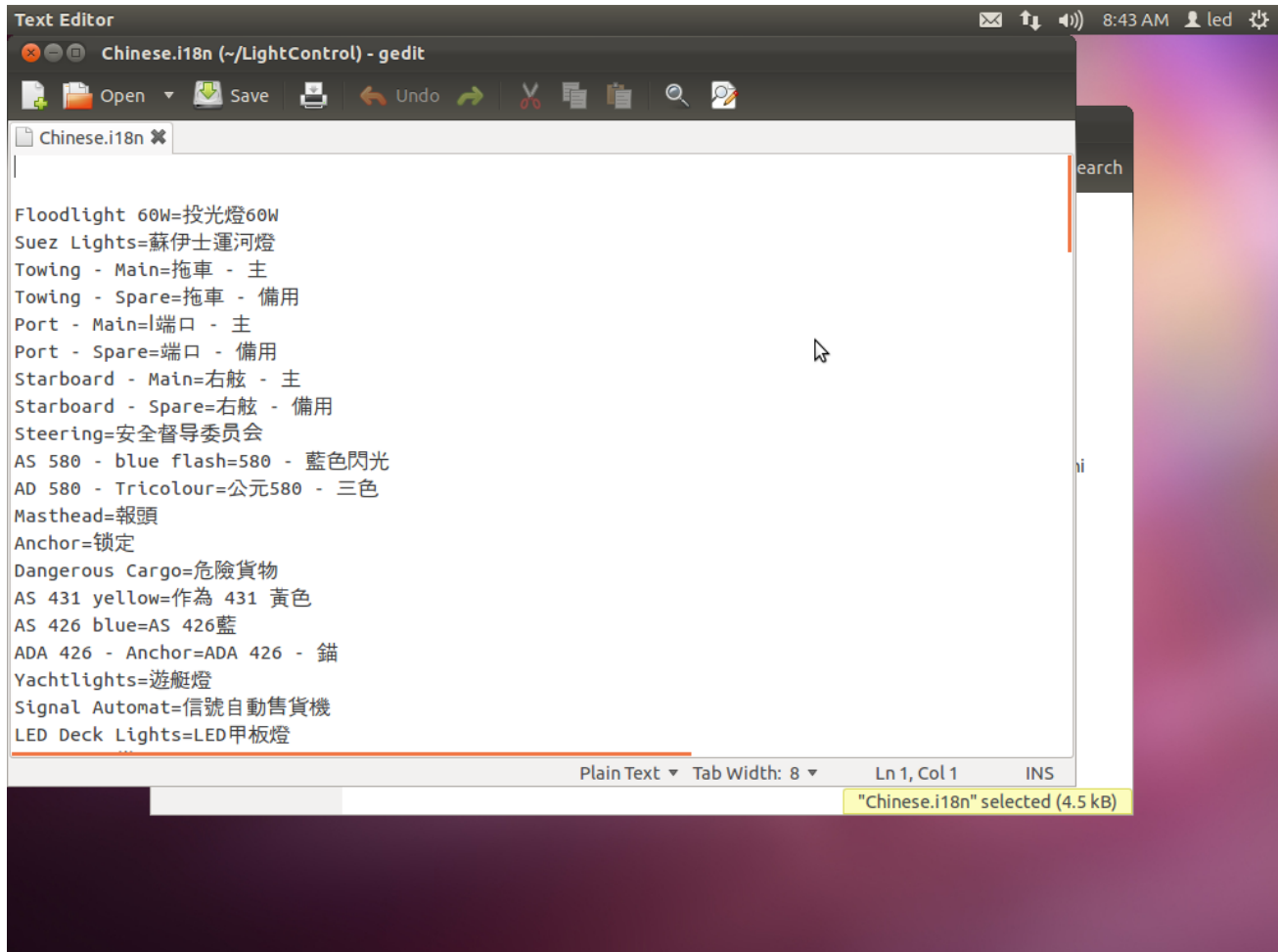
3.2.5 OS Administration

OS means Operating System Administration

To reach the Administration area you have to push that button. In this area you will be able to change or organize the ground basis of this system. You have to be very careful in this area, because you will affect the whole basis of this system.

Following screen you will see:
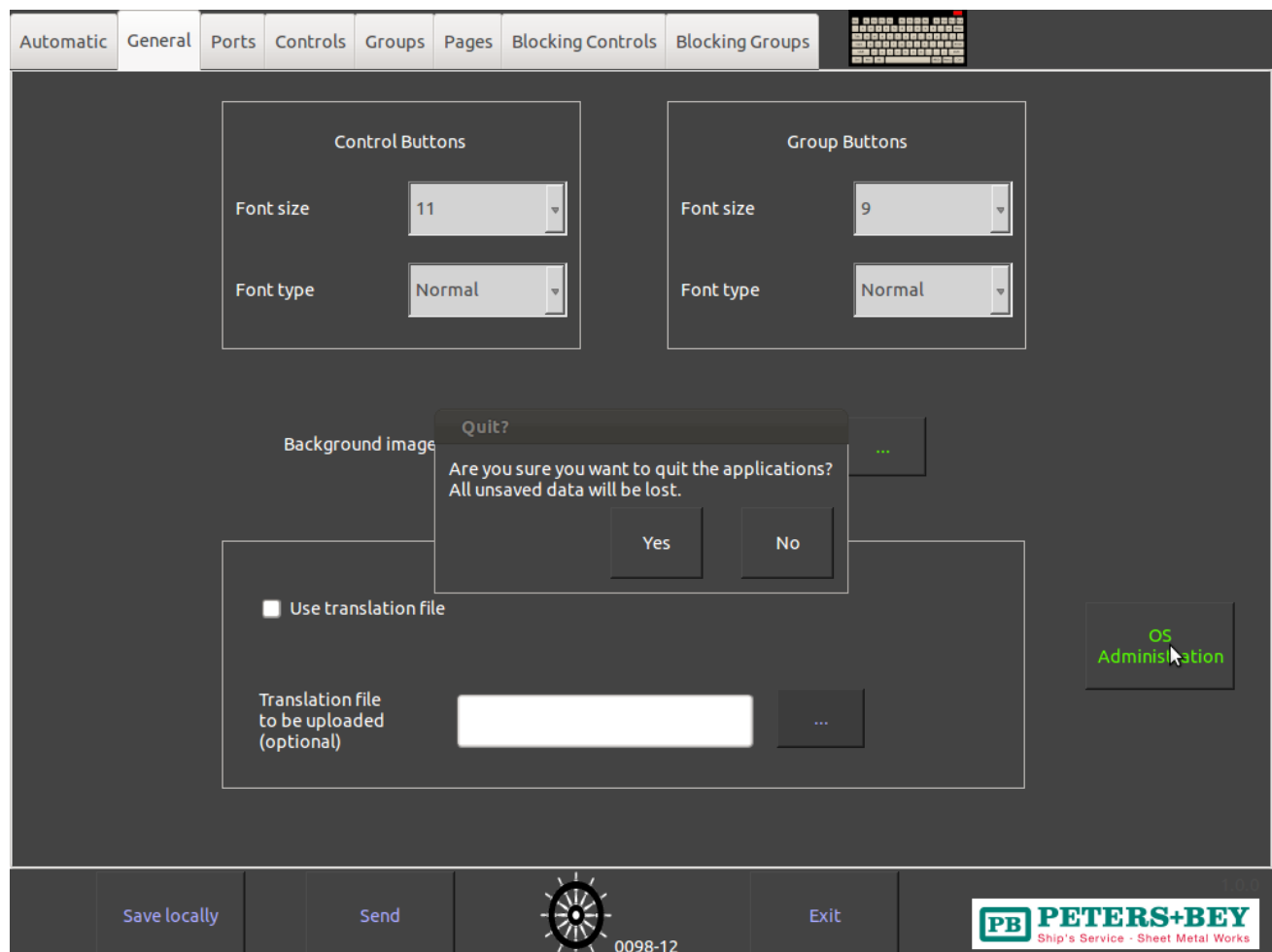
Choose yes or no if you want to come in the administration area.

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3.3 Ports

To come in the configuration modus you have to go following way.

Press Push bottom | **Service**

Press Push bottom | **Configuration Tool**

Press Push bottom | **Ports**

In this area you are able to install the different modules. Each module is one of the Basis Measuring Modules. The system will realize when you install another Measuring module.
This area is only necessary if you install an extra Measuring module.

You have to set the hook in "In Use" field. Ports which have no hook will be out of use.

You finish the different language choosing with the push bottom | **Send**

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3.4   Controls

To come in the configuration modus you have to go following way.

Press Push bottom   **Service**

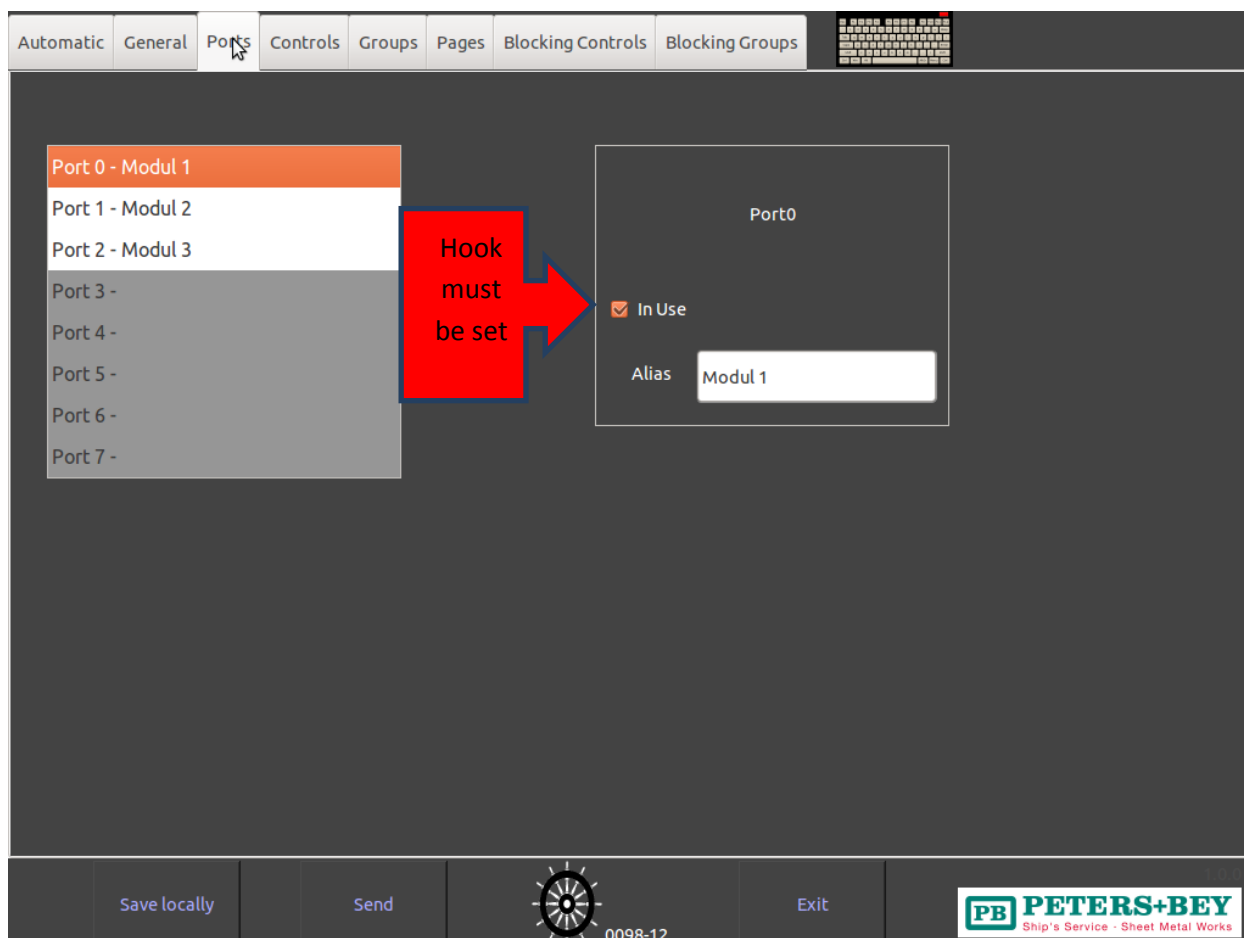Press Push bottom   **Configuration Tool**

Press Push bottom   **Controls**

In this area you are able to install the different electrical items. Everything what you see on the screen will be selected is this area.

Following screen you will see.

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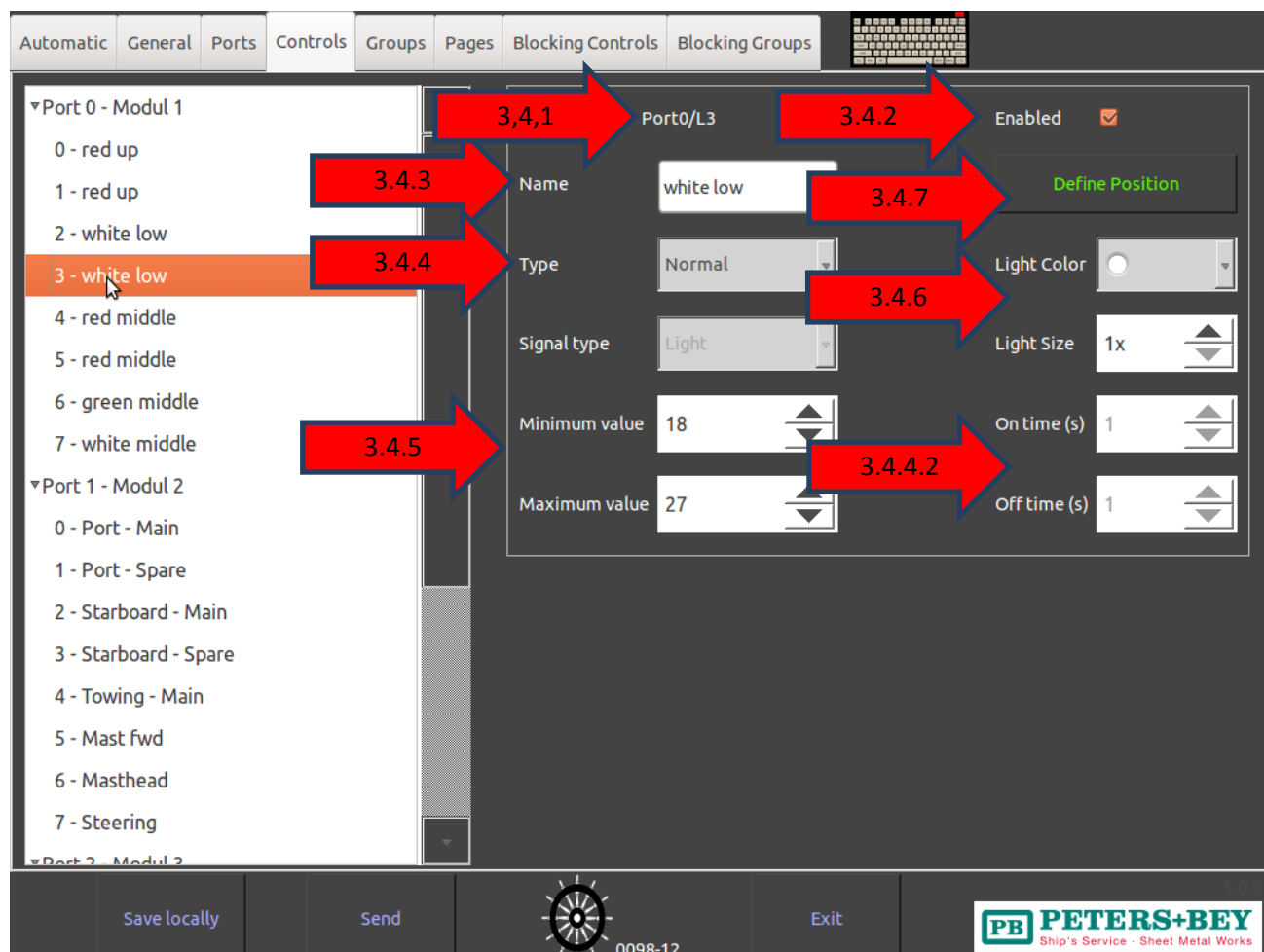
3.4.1 Position

The position is the exact detail about the position of the light in the Basis Measuring module.
Port 0/L0 is the first module – first position. (Modul 1 – Lantern 1)

3.4.2 Enabled

With the hook in the Enabled field you activate an electrical item. If you take out the hook you can see the electrical item in grey color and this electrical item is out of use. You are not able to turn it on or off.

3.4.3 Name

Here you give the name of the electrical item. The name will be seen on the screen.

3.4.4 Type

In this field you decided what type of lantern or electrical item you have. If you touch the right side of the type field you will see the 3 different types.

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3.4.4.1 Normal

The "Normal" mode is for a constant Light or electrical item.

3.4.4.2 Flashing

With the flashing mode you are able to create your own flashing signal. Therefor you have to set the "On time" and "Off time" in seconds. On the screen you will see a flashing symbol.

3.4.4.3 Signal

All items which are marked with "signal" are running with the Signal Automat.
All signals which are running with the Signal Automat have to be connected in one Basic measuring board.

3.4.4.3.1 Type of Signal

Further you have to choose the signal type. For the Signal Automat you need the Maneuvering Light and/or the Horns.

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3.4.5 Minimum / Maximum Value

Here is the position of the power consumption of the electrical item. The power consumption will be detected automatically with the calibration of the system. If there are any problems during the sailing of the vessel you are able to change these values. But you have to be very careful with any changes, because this affects the points of alarm of each item.

3.4.6 Light color / Lights Size

In this field "Lights Color" you choose the color and form of the symbol on the screen.

In the field "Lights Size" you choose the size of the symbol on the screen.

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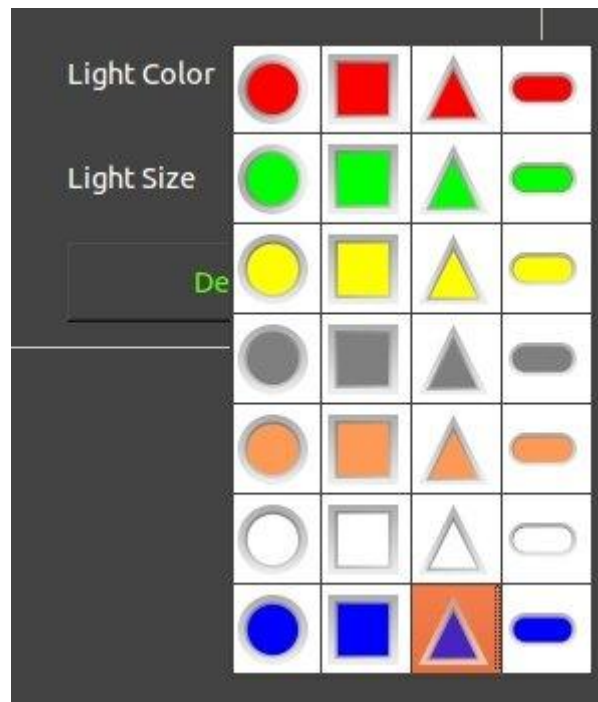
3.4.7 Validate Position

In this field you can position the symbol of the light/electrical item on the screen.
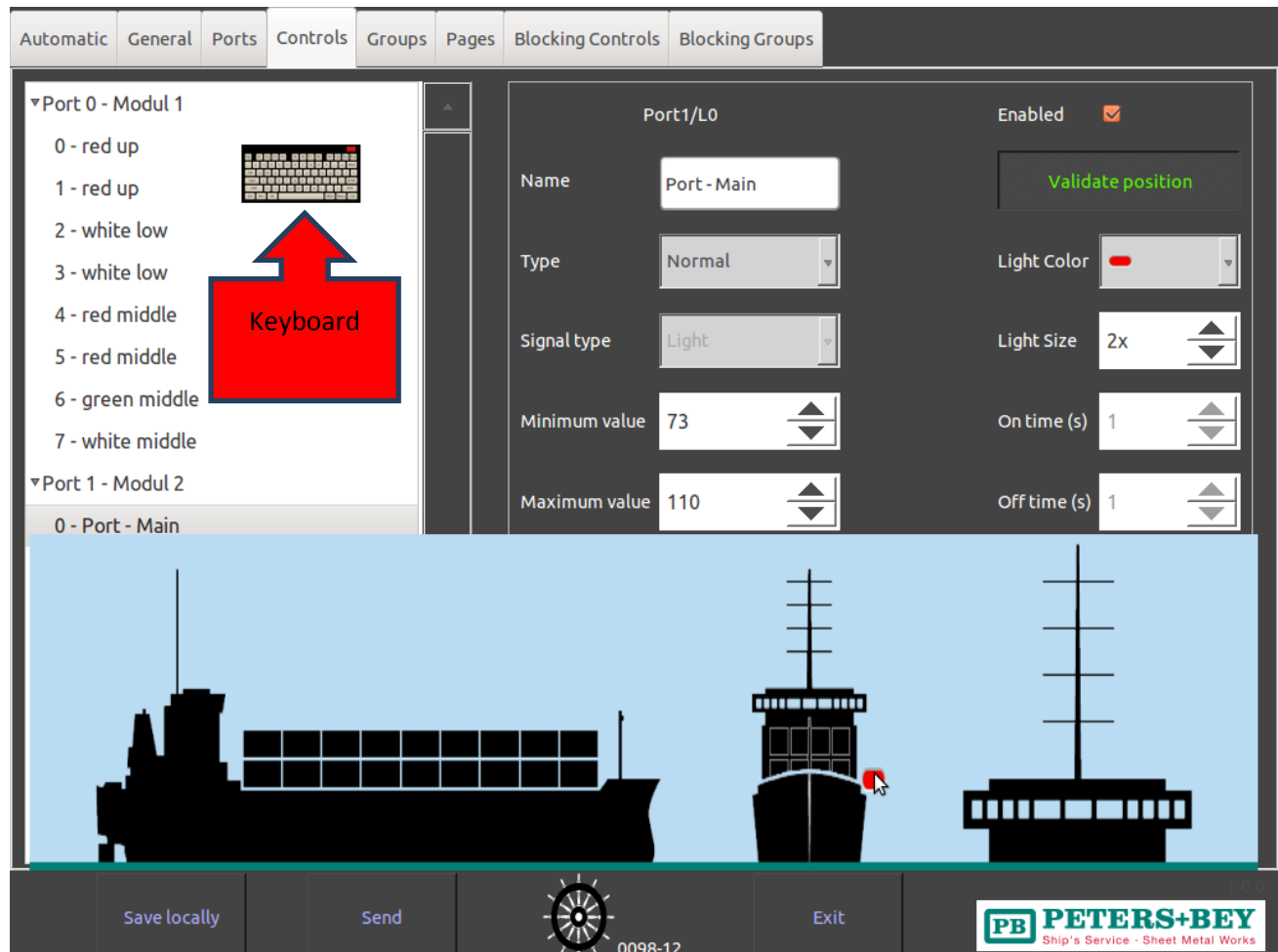
For the fine tuning for the position you can use the keyboard.

For opening the keyboard you have to press the keyboard symbol.

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3.4.7.1   Keyborad   **25**
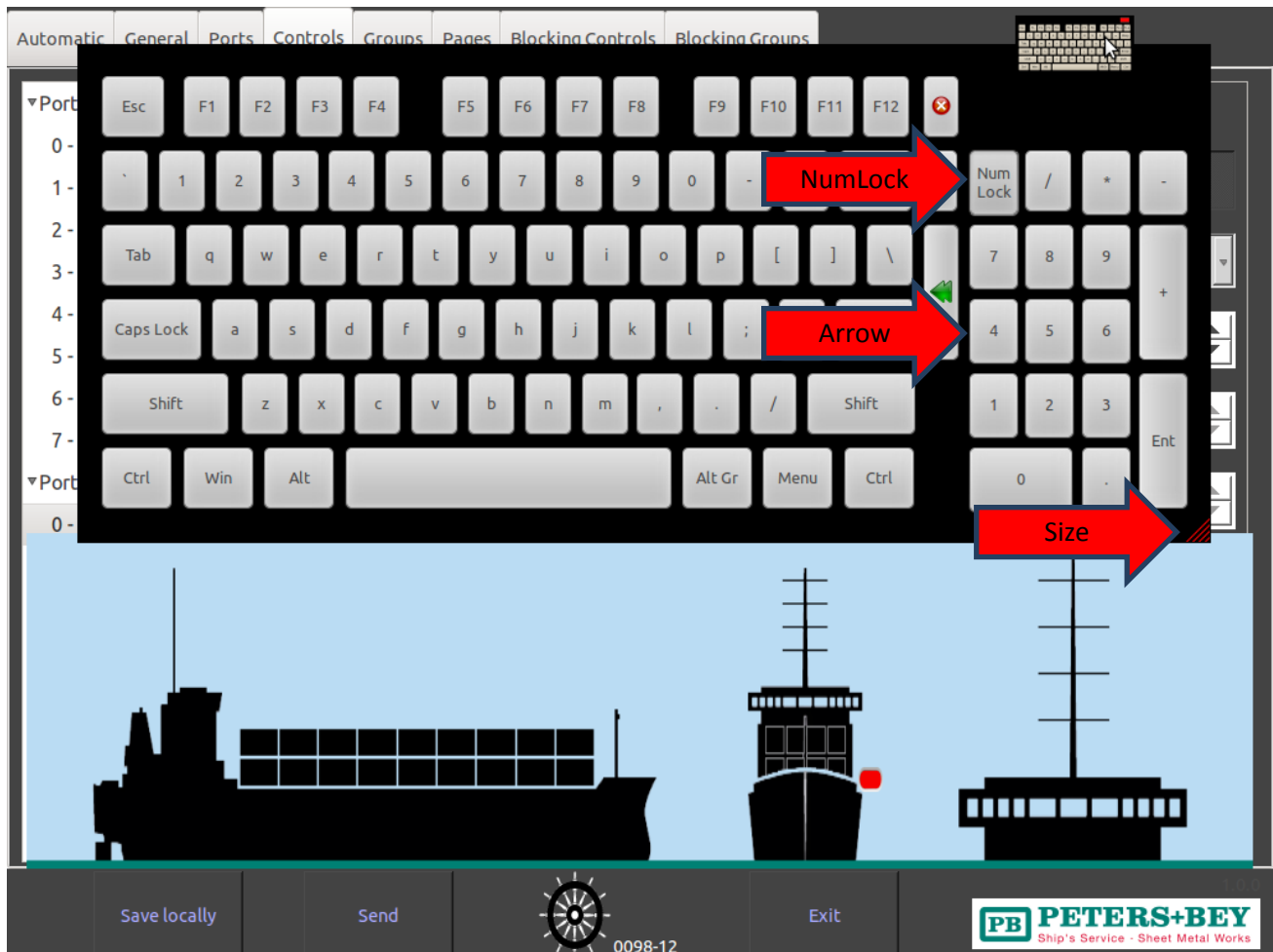
To come to the arrows you have to press the [**NumLock**] push button. With the arrows you are able to do the fine positioning in the different directions.

To change the size of the keyboard you have to press the right corner and change the size.

You finish the complete installations of the Lights with the push bottom [**Send**]

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3.5 Groups

Group programming gives you the possibility of depositing different sailing/maneuvering conditions of a vessel. The programming gives you the possibility to deposit all existing lights in a group. It is possible to switch on or off extra lights during the use of group push buttons. The group-selectors simplify the circuit of various lights at the same time.

You are able to turn on/off allot of different Lights at the same time. You are always able to turn on/off other lights than the group if necessary.
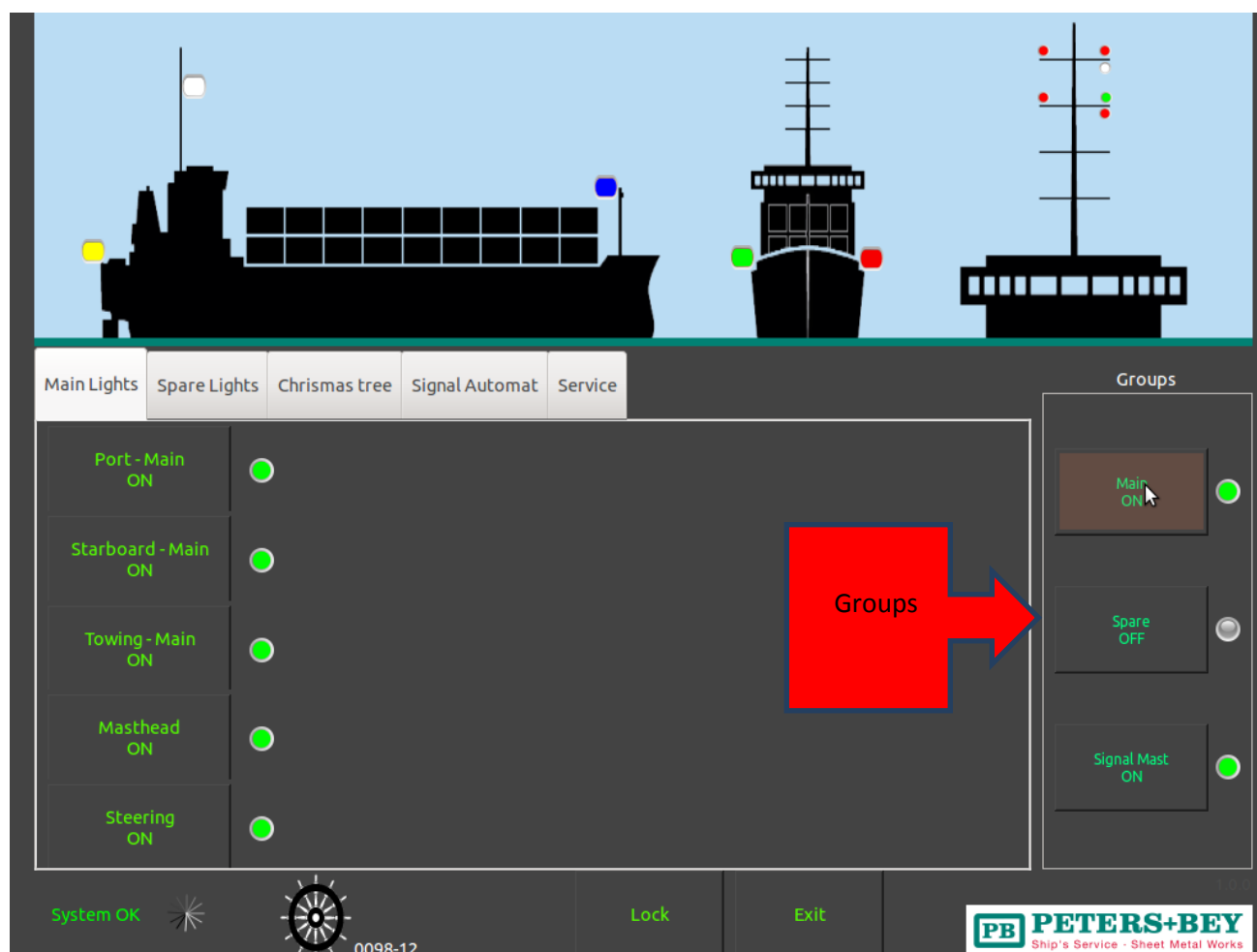
To come in the configuration modus you have to go following way.

Press Push bottom **Service**

Press Push bottom **Configuration Tool**

Press Push bottom **Groups**

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Following screen you will see.
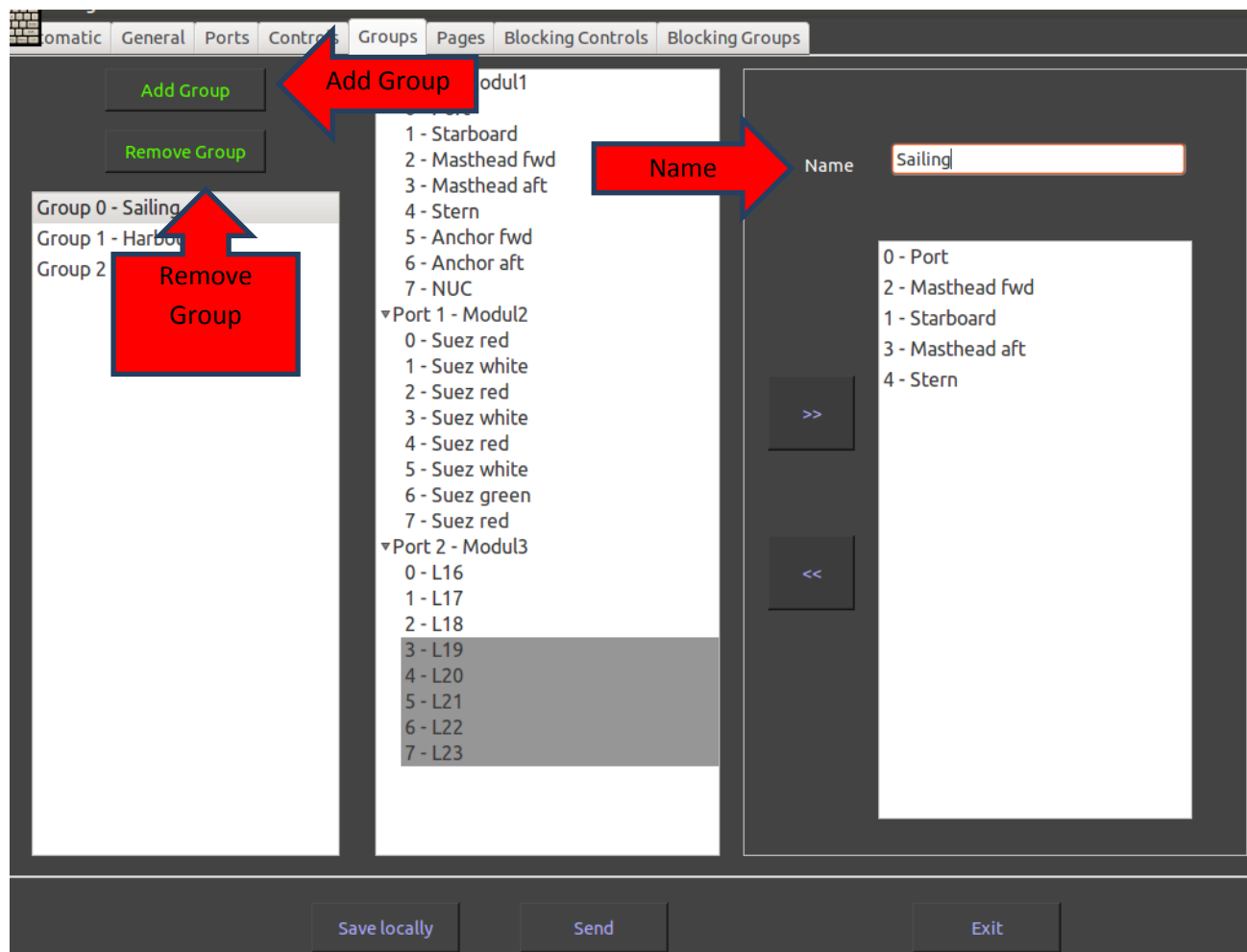
3.5.1 Add Group

To create a new group you have to press the push button **Add Group**

After that you have to select the new group and give him a name.

To move a light in the group you have to select the light and press following push button **>>**

To remove a light from the group you have to select the light and press following push button **<<**

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3.5.2 Name

The name is the name of the group. There for you have to select the group on the left side and change the name.

3.5.3 Remove Group

To remove a group you have to select the group and press following push button [**Remove Group**]

After you have finished all installations or changes in this area

Press the push button [**Send**]

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3.6 Pages

The point "Pages" gives you the chance to create your own layout of the screen. You can decide and program your own pages. The result of the programming of the pages you can see on this next picture
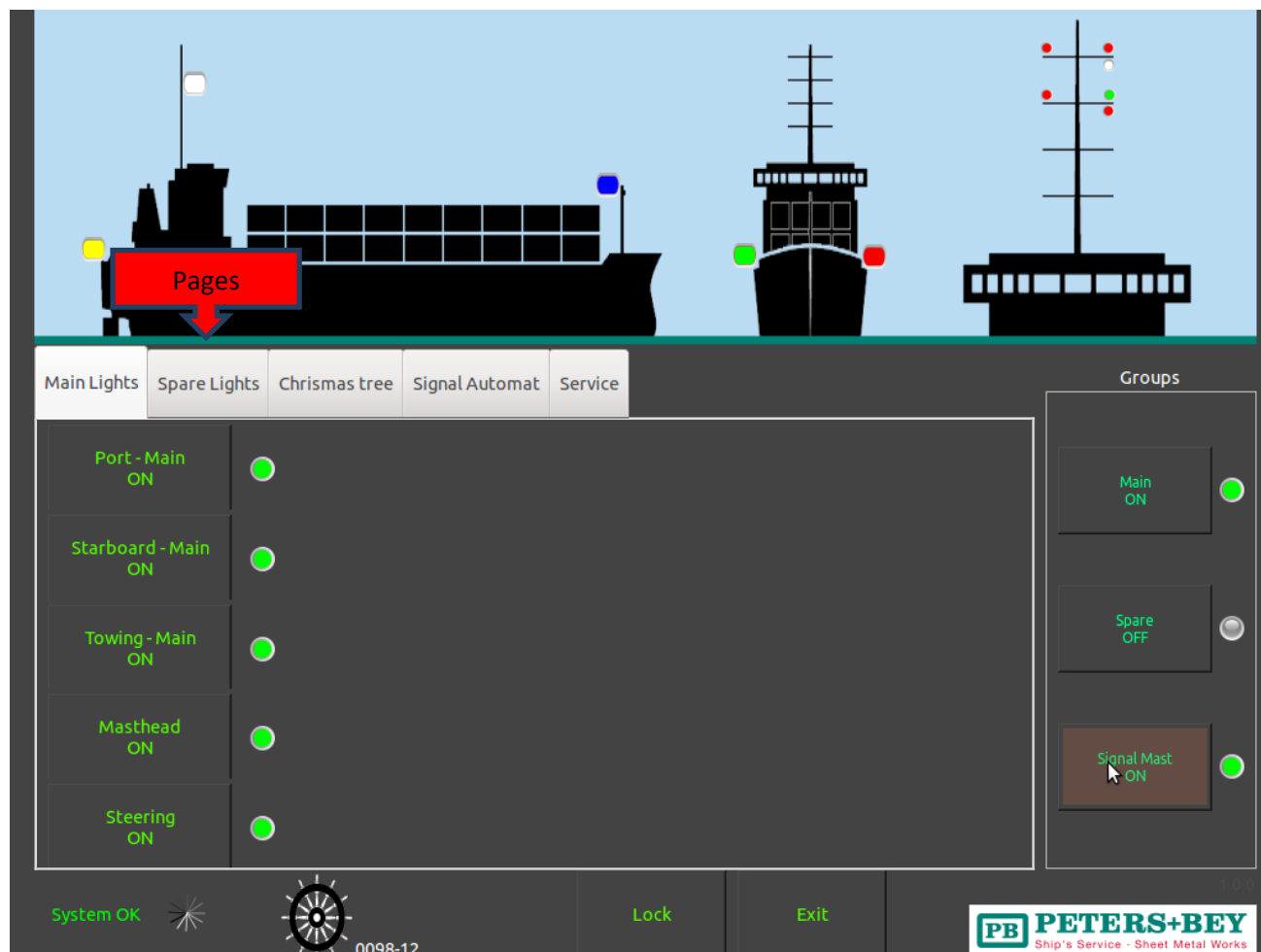
To come in the configuration modus you have to go following way.

Press Push bottom | **Service** |

Press Push bottom | **Configuration Tool** |

Press Push bottom | **Pages** |

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Following screen you will see.

3.6.1 Add page

To create a new page you have to press the push button **Add Page**

After that you have to select the new page and give him a name.

To move a light in the page you have to select the light and press following push button **>>**

To remove a light from the page you have to select the light and press following push button **<<**

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3.6.2 Name

The name is the name of the page. There for you have to select the page on the left side and change the name.

3.6.3 Remove page

To remove a page you have to select the page and press following push button [**Remove group**]

After you have finished all installations or changes in this area

Press the push button [**Send**]

After you have finished all installations or changes in this area

Press the push button [**Send**]

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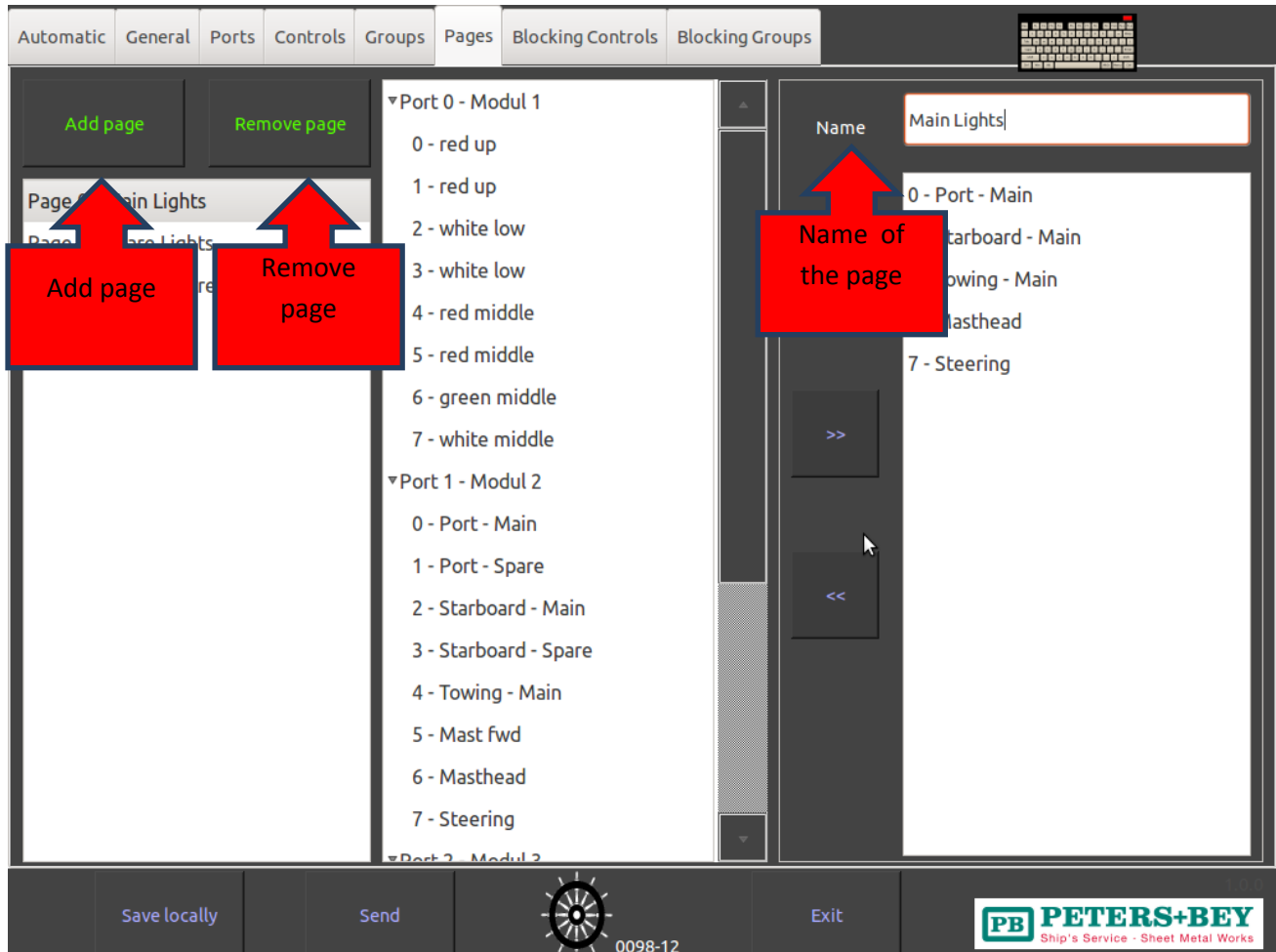
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3.7   Blocking

To come in the configuration modus you have to go following way.

Press Push bottom   **Service**

Press Push bottom   **Configuration Tool**

Press Push bottom   **Pages**

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3.7.1 Blocking Controls (Lights / Electrical items)

The Blocking mode gives the user, in a matrix, the possibility to protect certain lantern/electrical items from simultaneous switching.

For the setting you just have to place a cross in the fields.

Following screen you will see.

If you try to turn on one of the blocked lights you will get an Error ”Can not be switch on:” information.

To quit this information you have to press the push bottom [OK]

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3.7.2 Blocking Groups

The Blocking mode gives the user, in a matrix, the possibility to protect certain groups from simultaneous switching.

Following screen you will see.

For the setting you just have to place a cross in the fields.

If you try to turn on one of the blocked groups you will get an Error "Can not be switch on:" information.
After you have finished all installations or changes in this area

Press the push button   **Send**

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3.8. Freeze Display

In the service area you are able to control the real power consumption of each electrical item. Therefore it is much easier to stop the screen. Therefor you push the Freeze Display push buttom.

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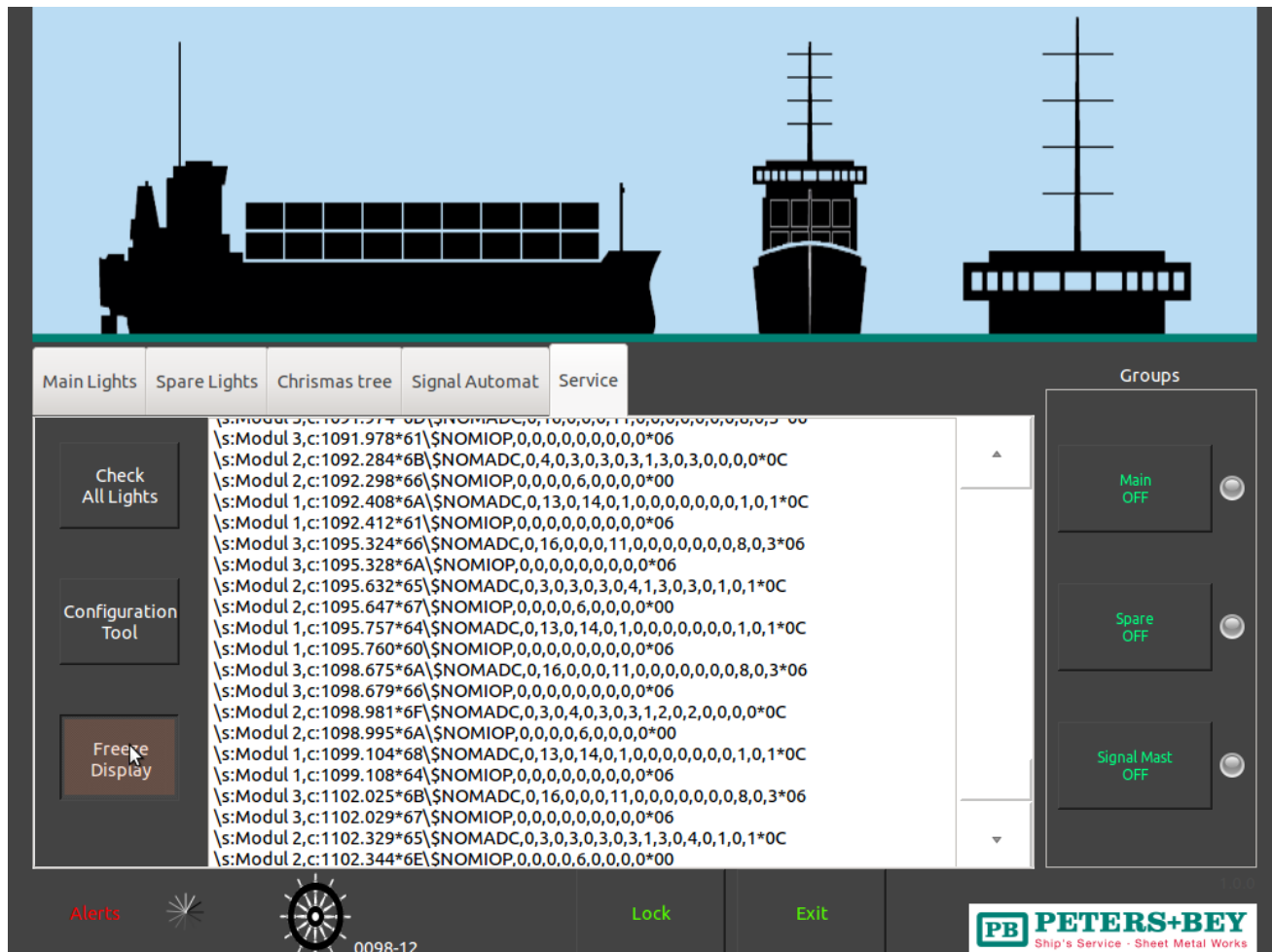
3.9. Function Information

For your information that the system is working properly we have a small Sun stroke which circle around.

If the sun moves underscore the system is working properly.

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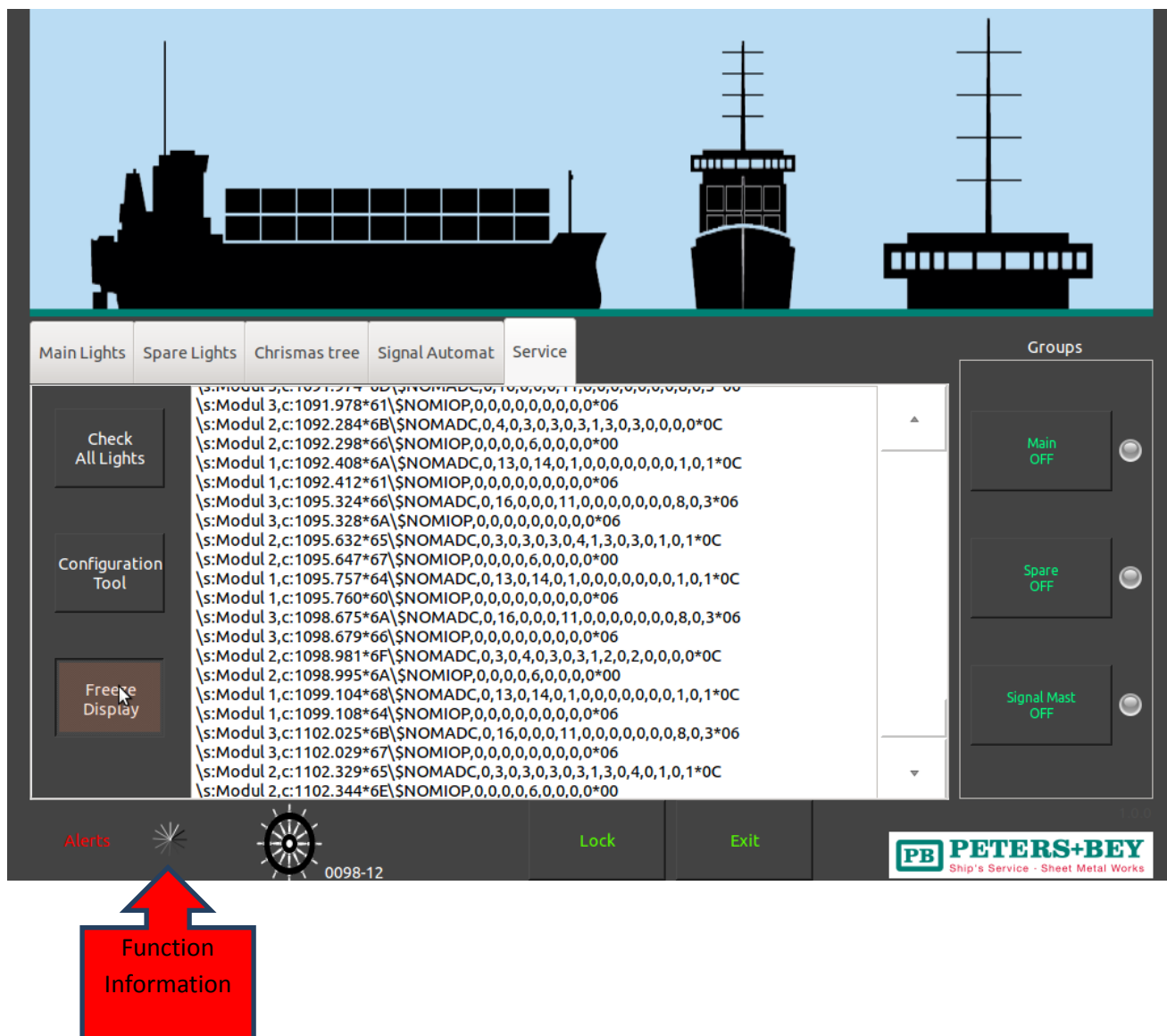
4.   Measurement and Detection

Measurement and detection is possible from 1mA up to 700mA.

The maximum load of power consumption per channel is 2,8A.

That means you can run LED and conventional Lighting, Floodlights, Door controlling or other electrical items at the same time.

Lanterns are connected directly to the modules.

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5.   Service

5.1   Ethernet Service

This Ethernet service is only possible in the OS Administration area.

The System can be serviced via Network. There for you have to connect the system with an Internet connection.

The monitor has to be connected to the Internet.

Than you have to start the Team Viewer.

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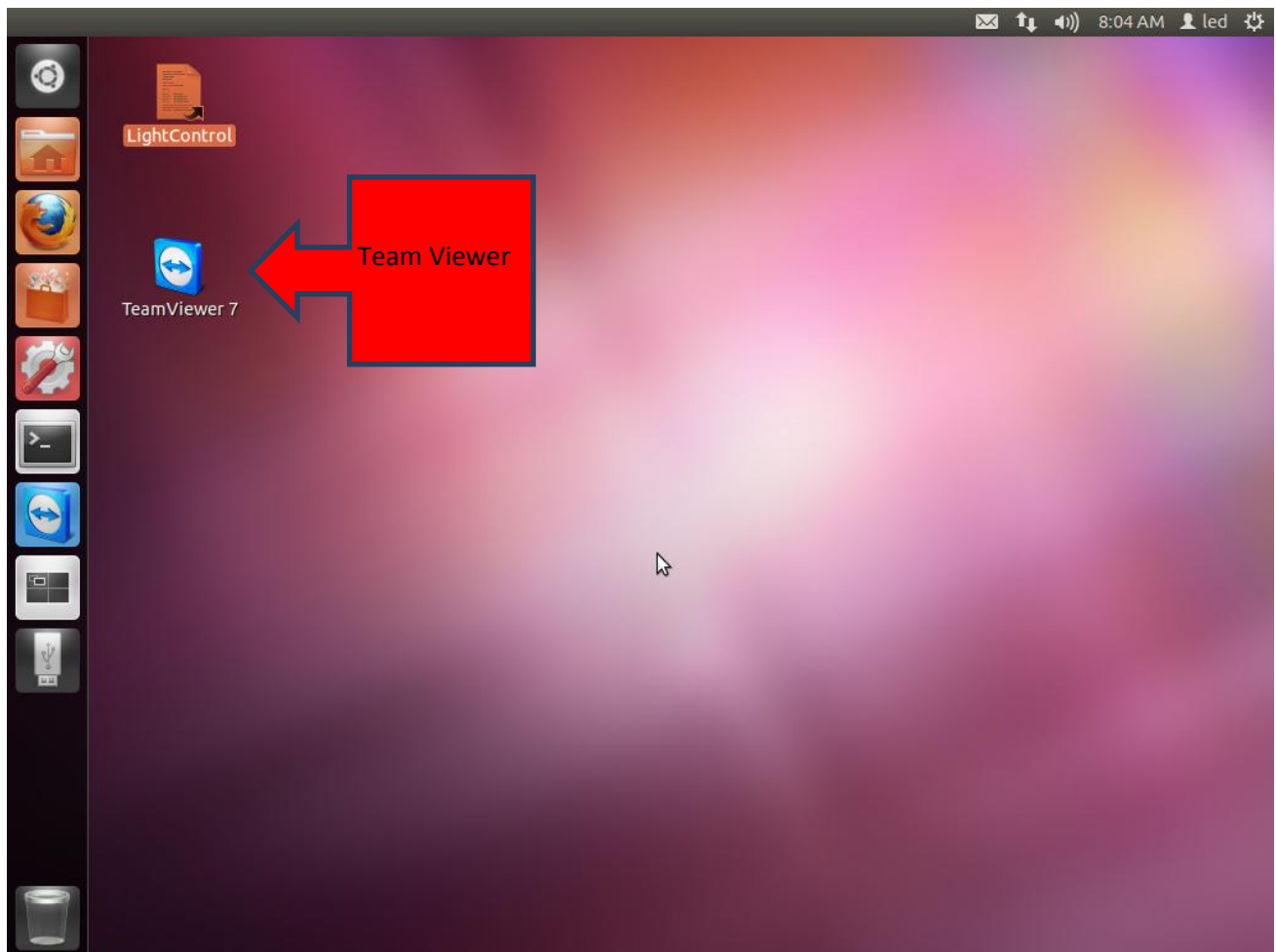
Following screen you will see.

Now you have to contact Peters + Bey in Hamburg:

Phone number: +49 40 54 76 00 0

They will ask you about the **ID - Number** and the **Kennwort (Codeword).**

The service engineer will now be able to communicate directly with your system.

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5.1.1 Service stations

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	BH Global Marine Ltd. NO. 8 Penjuru Lane Singapore 60 91 89 Phone: +65 6291 4444 Fax: +65 6294 4474 Mail: kmlee@bhglobal.com.sg Mobile: +65 9638 2574 www.bhglobal.com.sg
	Britmar Marine Ltd. Unit 102 2433 Dollarton HWY CA-V7H 0A1 North Vancouver B.C. Phone: +11 604 / 98 34 30 3 Fax: +11 604 / 98 34 31 3 Mail: tony@britmar.com Mobile: +11 5346 0498 34 303 www.britmar.com

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5.2   Change Fuse

To change the fuse you have to press the lid and screw it to the left.
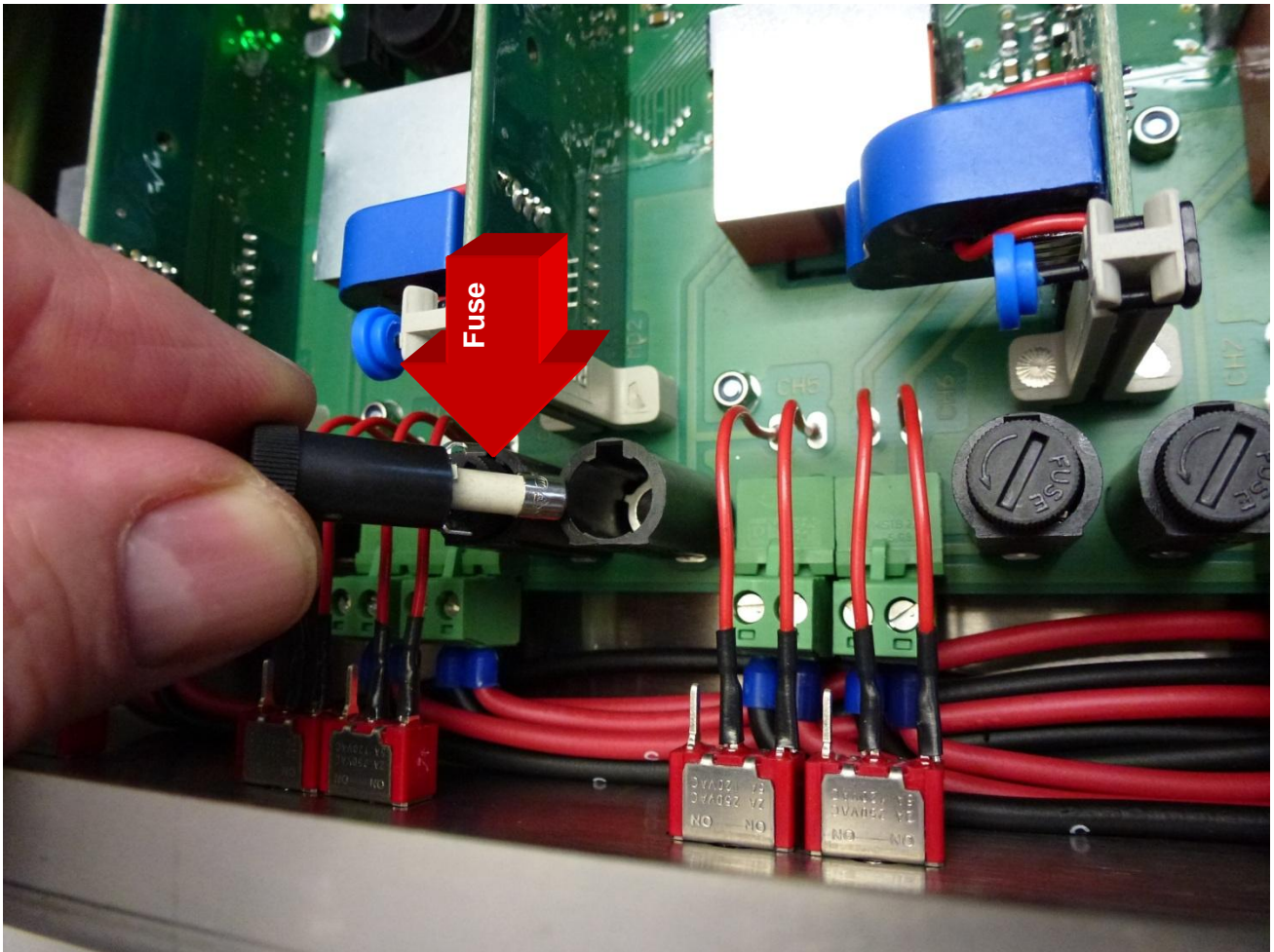
5.3   Type of Fuse

The fuse has following performance:

T13,15 Ah – 250V

Length: 20mm

Diameter: 5mm

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6. Technical data

6.1   Control unit

Power supply:	24VDC (18...36V DC)
Power consumption:	120...380mA (24V DC)
Operating temperature:	- 15°C ... 55°C according to EN 60945
Weight:	1,9kg

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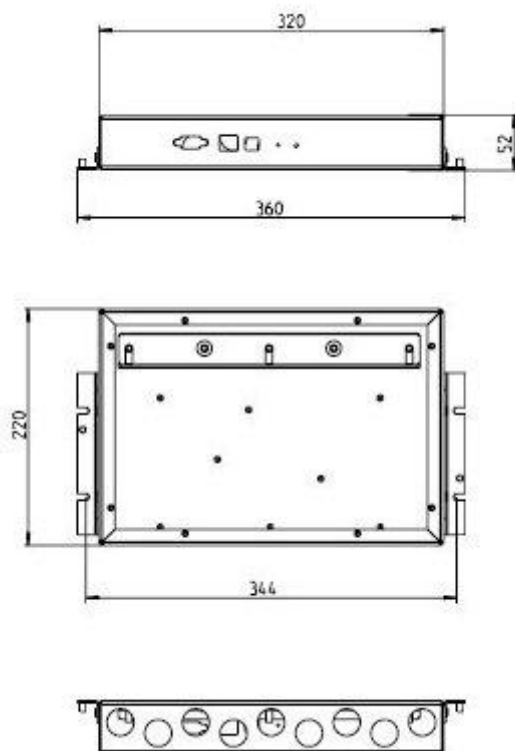
- NMEA 0183 connections can be set up either as entry or as exit
- Multiplexer and buffer/converter united in one device
- PC Interface RS232
- Speed of all NMEA interfaces is adjustable : from 1.200 Baud to 115.200 Baud
- Can be fully configured with the help of the accompanying PC software
- Inputs and outputs are galvanic isolated
- Intelligent data management helps to avoid data errors
- Data logging
- Data filter dynamically adjustable for high performance
- Robust casing
- Superior Quality

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6.2 Basis Measuring Module   44
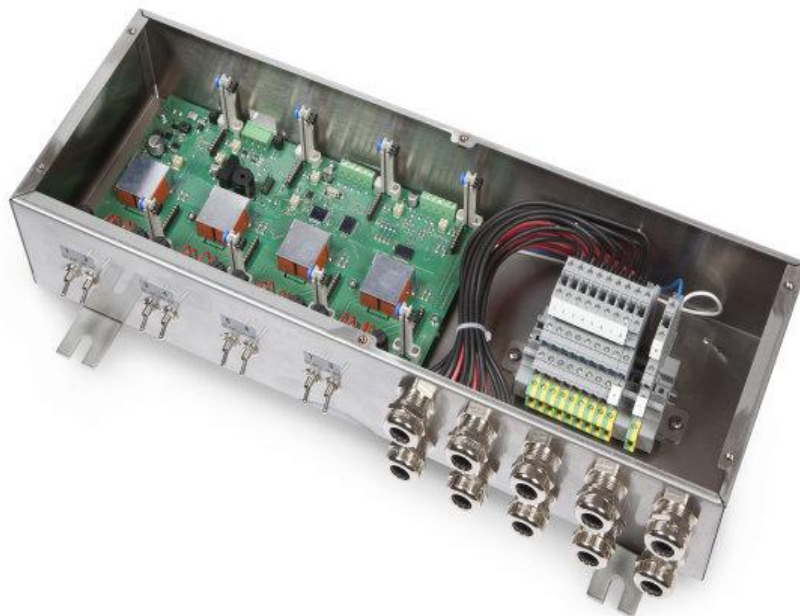
Operation Power:	24V DC
Detection Power:	10-30V DC and 115-230V AC
Operating temperature:	- 15°C ... 55°C according to EN 60945
PB- Article No.:	7800101
Weight:	3,2kg
Type:	PB-MM-Basis

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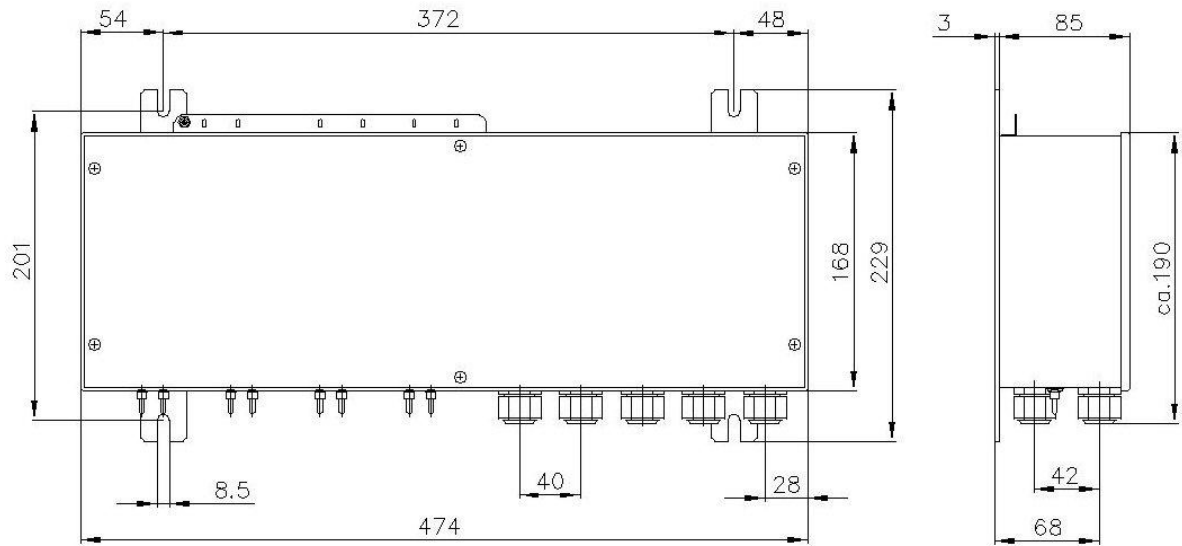
- EMV resistance according to EN60945
- Emergency toggle switches for each channel
- Stainless Steel box
- Superior quality – Made in Germany

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6.2.1 Measuring Card 115-230V AC

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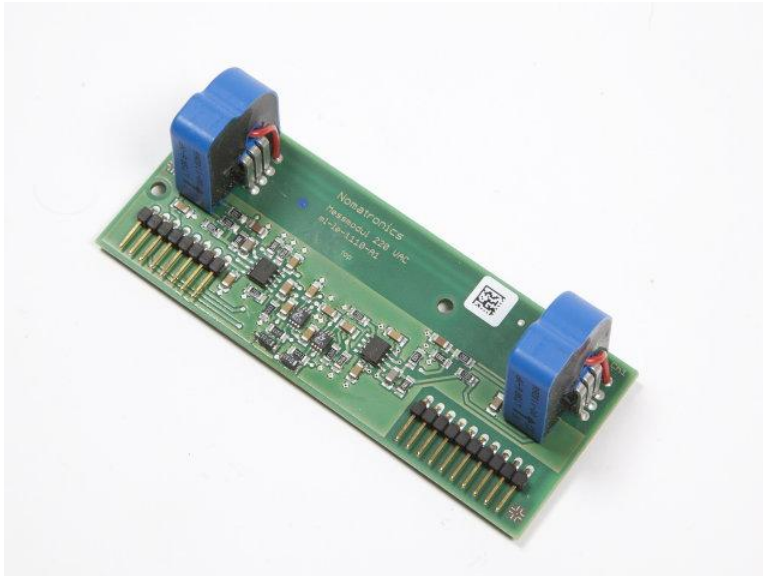
Power supply: 115-230 AC

Operating temperature: - 15°C ... 55°C according to EN 60945

Weight: 0,35kg

PB – Article number   7800102

Type: PB-MM

- This card is designed for 2 electrical items
- Superior quality – Made in Germany

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6.2.2 Measuring Card 10-30V DC
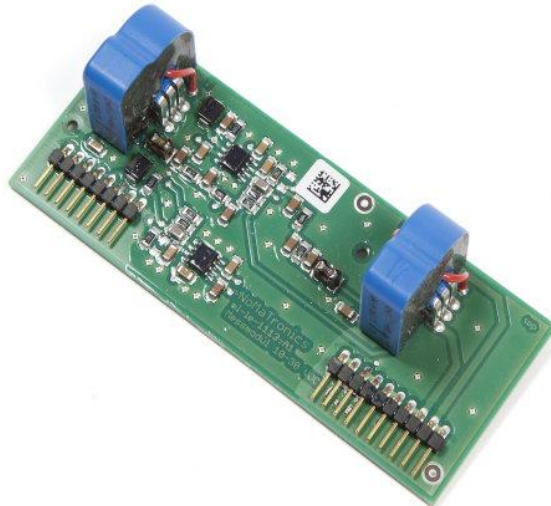
Power supply:	10 – 30V DC
Operating temperature:	- 15°C ... 55°C according to EN 60945
Weight:	0,38kg
PB – Article number	7800103
Type:	PB-MM

- This card is designed for 2 electrical items
- Superior quality – Made in Germany

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6.3   Connection Cable

This connection cable is for the connection between the control unit and the Base Measuring Module. Cable length – 2m
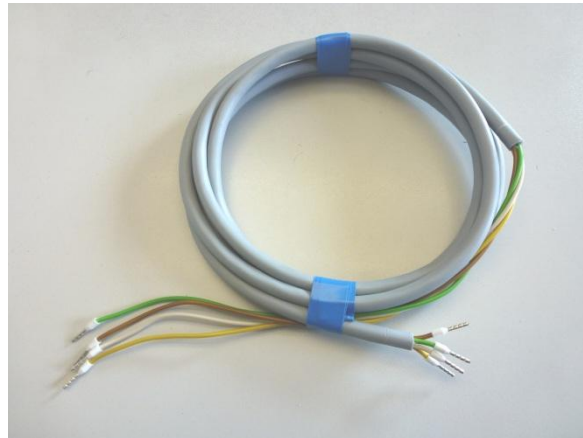
Weight: 0,16kg

PB – Article number   7800110

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6.4 Touch screen Monitor - 13,3" - TFT

Power supply:	24V DC
Operating temperature:	- 15°C ... 55°C according to EN 60945
Weight:	4,4kg
PB – Article number	7800104
Type:	HD 13T21 MMC-E1C-PABA

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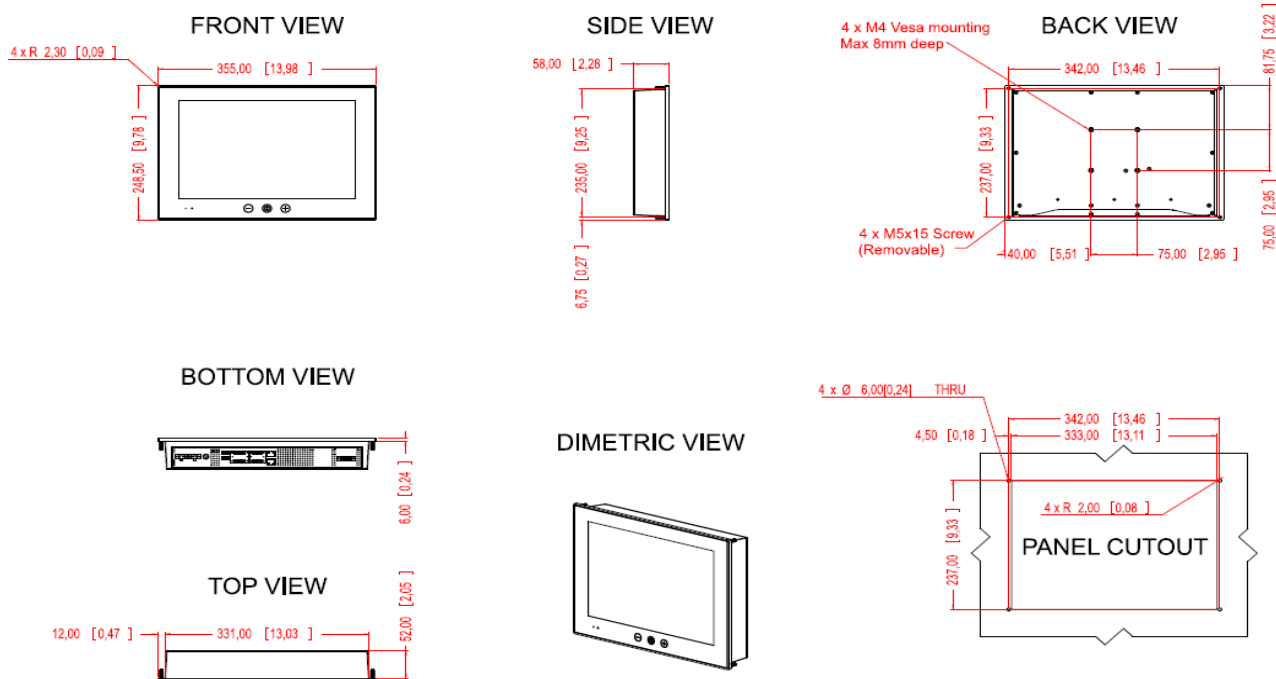
TFT Technology:

• 13.3 inch TFT Liquid Crystal Display module
• Widescreen, Aspect Ratio 16:10
• a-si TFT Active Matrix
• CCFL Backlight

TFT Caractaristic:

• Native Resolution : 1280 x 800 (WXGA)
• Pixel Pitch (RGB) : 0.2235 (H) x 0.2235 (V) mm
• Response Time : 6/10ms (typical) (Tr/Tf)
• Contrast Ratio : 800:1 (typical)
• Light Intensity : 400 cd/m2 (typical)
• Viewable Angle : 70 deg (H) 60 deg (V) (typical)
• Active Display Area : 286.08 (H) x 178.8 (V) mm
• Max Colors : 262000

Inviromental Considerations:

Operating : Temperature -15 deg. C to +55 deg. C
Humidity up to 95%
• Storage : Temperature -20 deg. C to +60 deg. C
Humidity up to 95%
• IP-Rating : Protection: IP66 front - IP22 rear
(EN60529)

Safety Considerations:

Even although the test conditions for bridge units
provide for a maximum
operating temperature of 55°C, continuous
operation of all electronic
components should, if possible, take place at
ambient temperatures of only
25°C. This is a necessary prerequisite for long life
and low service costs.

Input and Output connectors:

• Primary Power 24VDC 1 x SL-SMT 90F (1 x 2
pole)
• Secondary Power 24VDC 1 x SL-SMT 90F (1 x 2
pole)
• LAN 2 x RJ45
• USB2.0 (<10m) 2 x Type A 1 x Pin header
• Solid State Relay (NO)
(over current protection)
2 x SCD 90F (2 x 2 pole)*
• Digital Input
(isolated/protected)
2 x SCD 90F (2 x 2 pole)
• COM (isolated RS-422/485) 1 x SC 90F (1 x 5
pole)
• Safety Signal Relay (NO/NC) 1 x SC 90F (1 x 3
pole)

* IEC 60950 Compliant, 48VDC.

Physical Dimentions:

• 355.00 (W) x 248.50 (H) x 58.00 (D) mm
• 4 x M4 VESA mounting 75x75mm, Max 8mm deep
• Built-in Console mounting 4 x M5x15mm screws
• Weight: 4,4 kg

User control:

**Behind front bezel - Glass Display Control™ (GDC)
IP66:**
• Power On/Off, Brightness Control (-/+), Light Sensor (not
visible)
• Programmable Alarm LED, Buzzer (not visible)

Power specification:

Power Supply:
• 2 x 24VDC : Model HD 13T21 MMC-E1C-PABA
Dual input, galvanic isolated, automatic switch between
power source
Power Consumption:
• Operating : 20W (typ) - 30W (max)

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7. Commissioning

7.1 Connection cable

The connection cable has to be used between the Basis Measuring cable and the Basis Module.

Please connect the cable in the shown way.
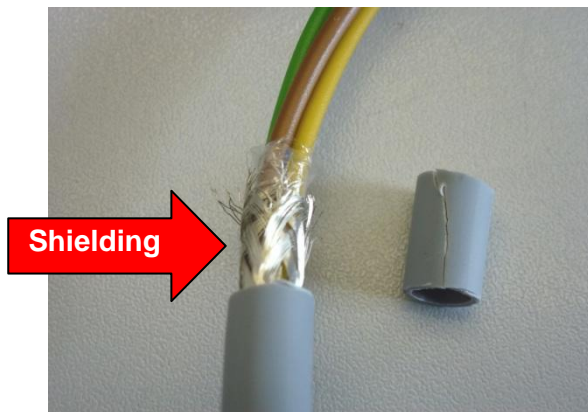
Remove the radical cables shroud for the shielding.
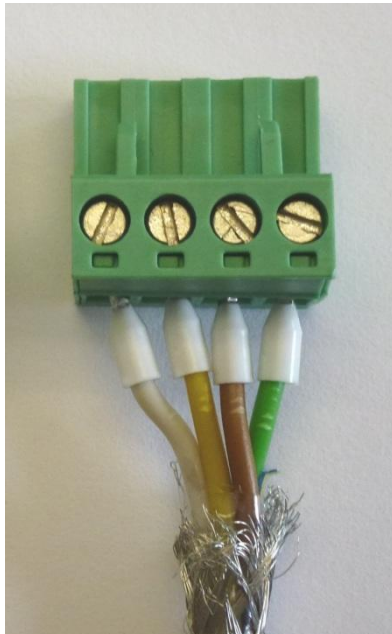
Connect the short cable end with the plugs in such a way, as you can see it on the photo.

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7.2   Basis Measuring Module
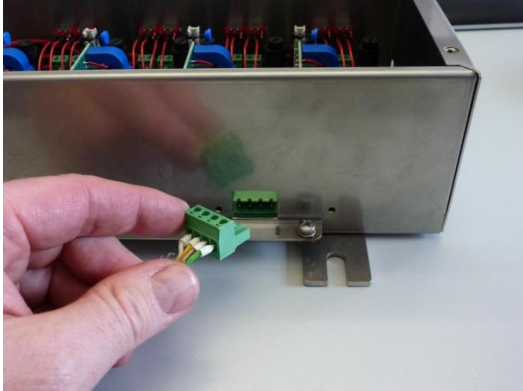
Connect the male plug with the socket at the backside of the Basis measuring module.
Do the same with all Measuring modules.
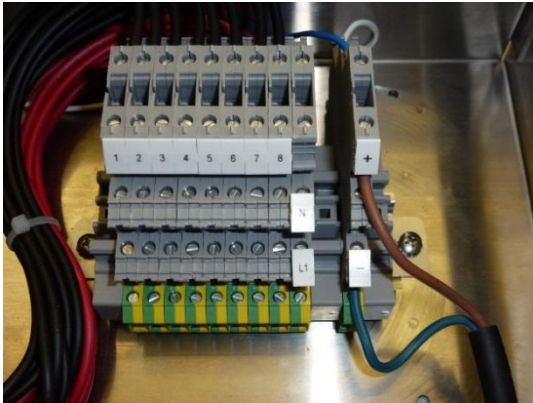
Connect the Basis measuring board with 24V.

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7.2.1 Basis Measuring Module Voltage 115/230V AC

Connect the lights / electrical equipment according to following drawing.

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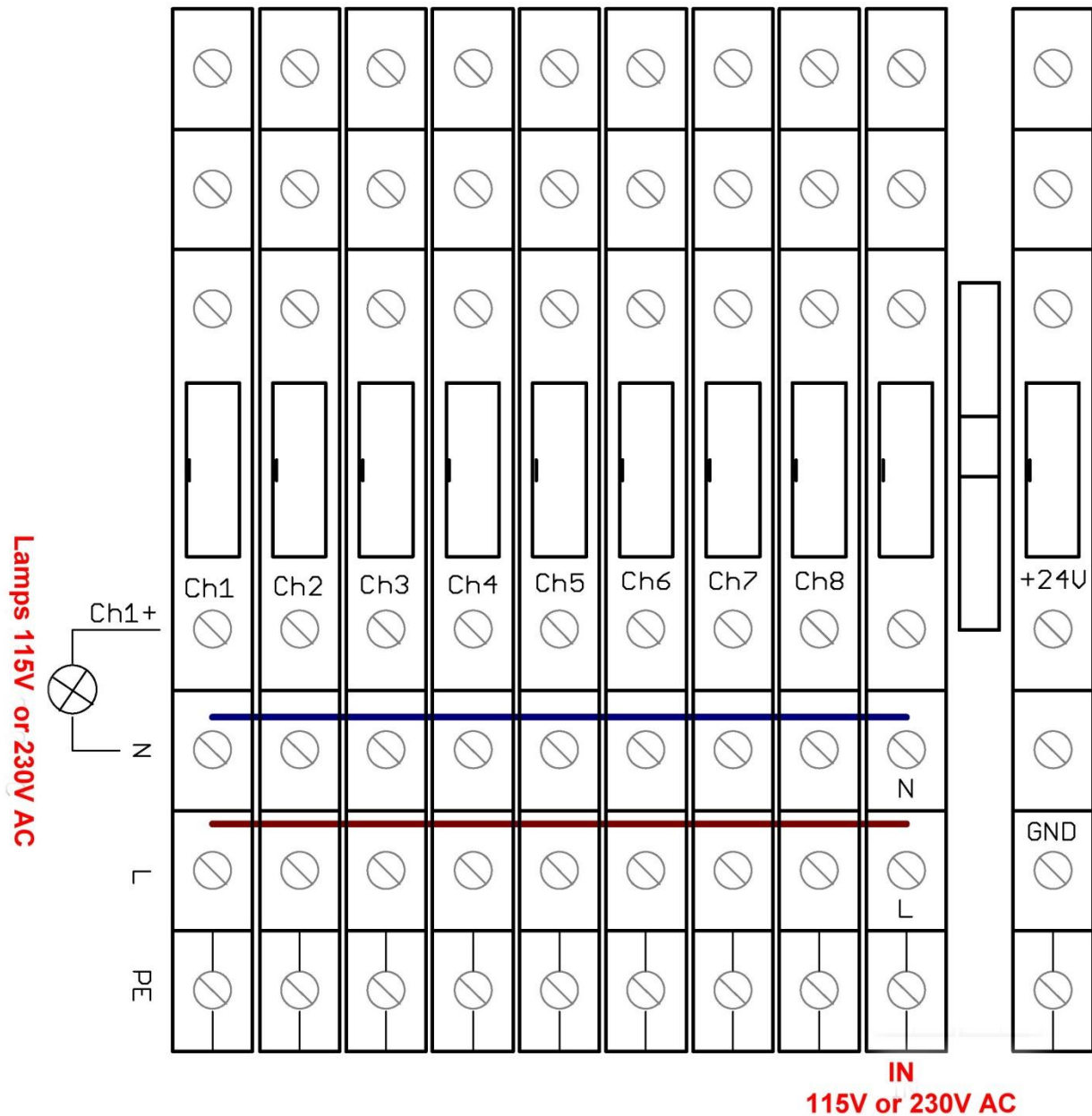
7.2.2 Basis Measuring Module - Voltage 12V / 24V DC

Connect the lights / electrical equipment according to following drawing.

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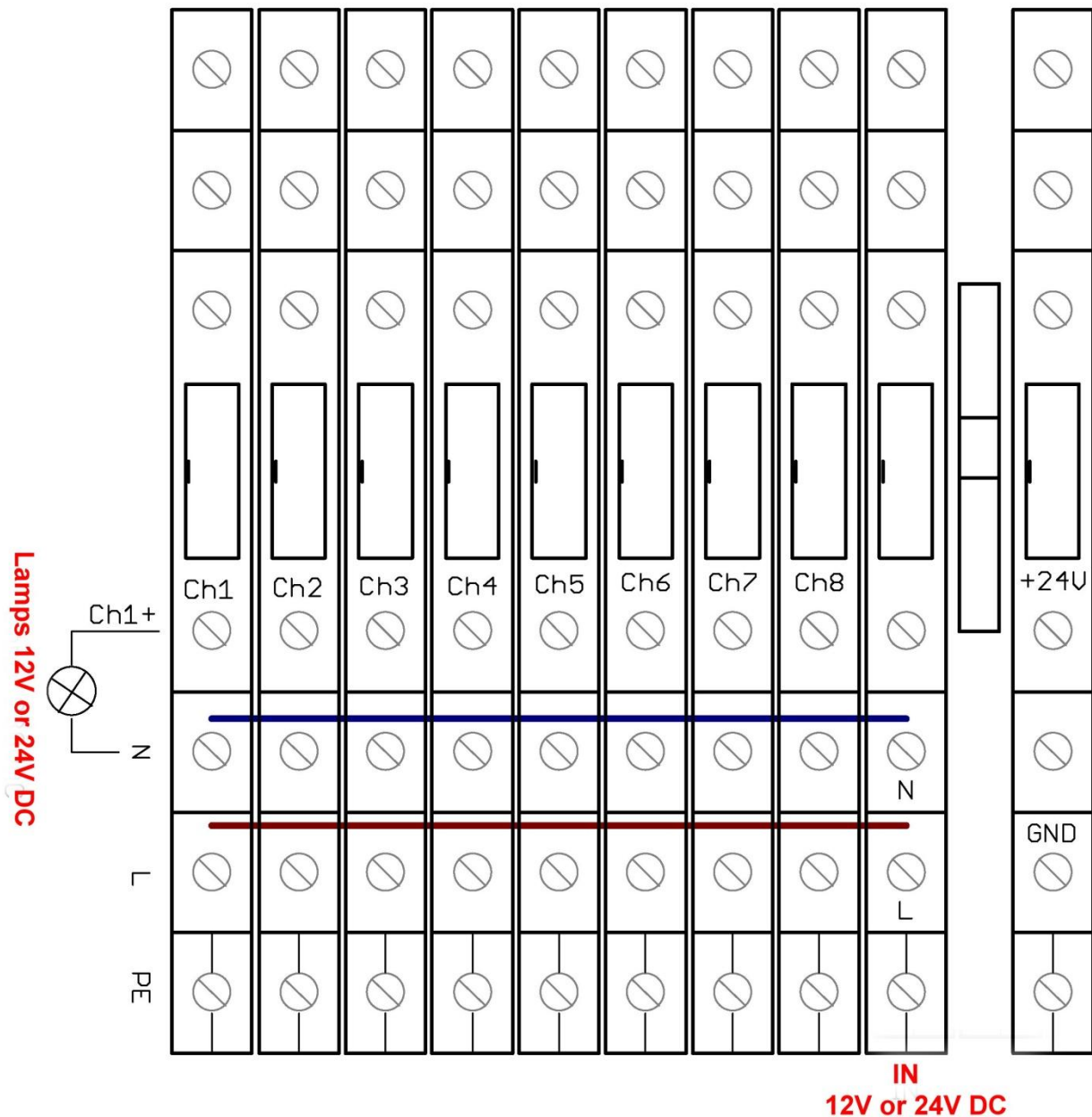
7.2.3 Emergency switches

In case that the monitor or some other parts of the system are out of work, you are able to switch on an off the Lights / Electrical equipment with the toggle switches.

During the normal operation of the system all toggle switches have to be in "OFF".
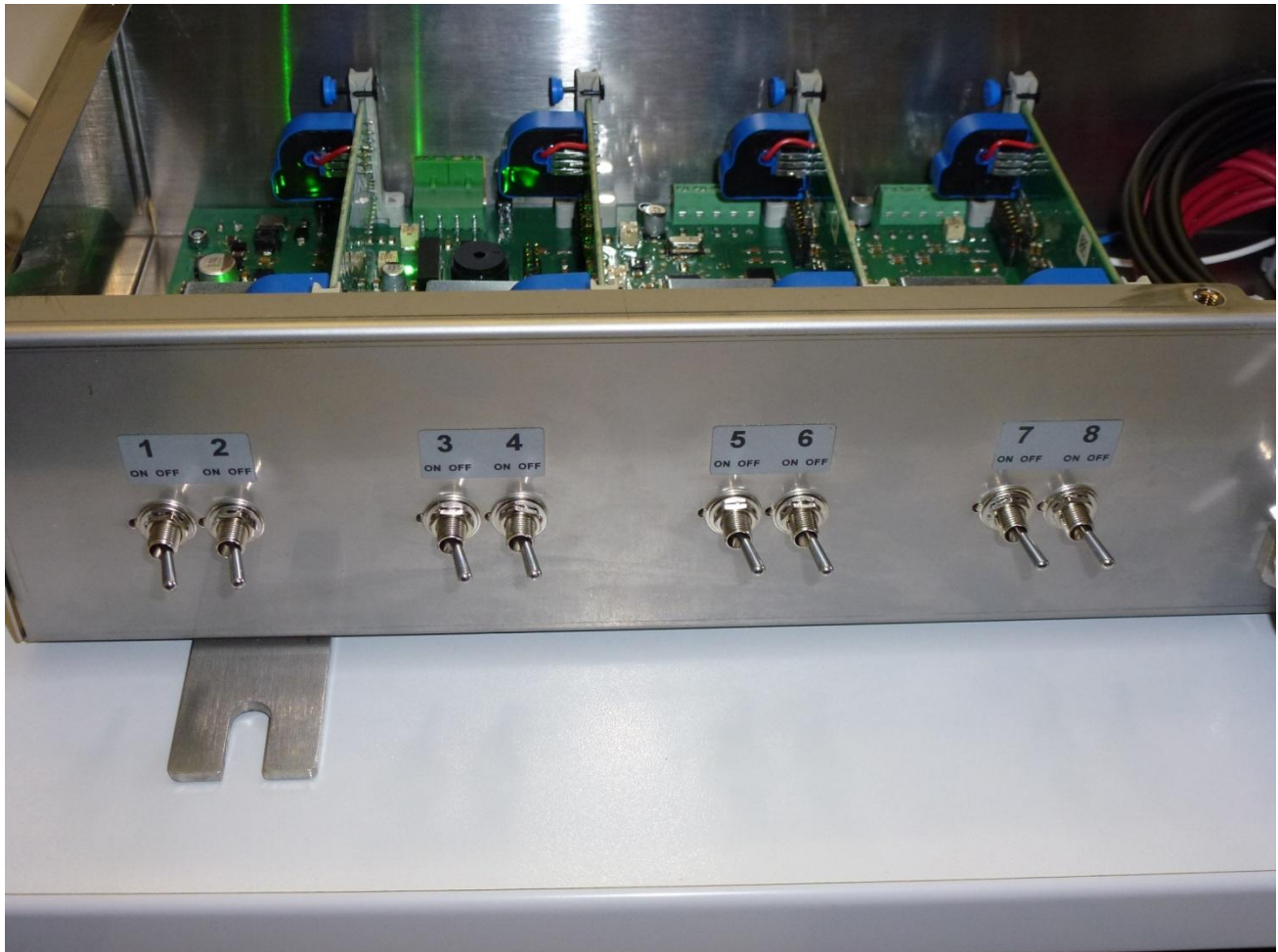
To use the toggle switches it is necessary, that the lanterns still have the running voltage. During manual use the lanterns will be not controlled.

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7.3   Control Unit

The Control Unit has an extra separate Operation Manual.

7.3.1 Main Voltage for the control unit

Connect the control unit with 24VDC.

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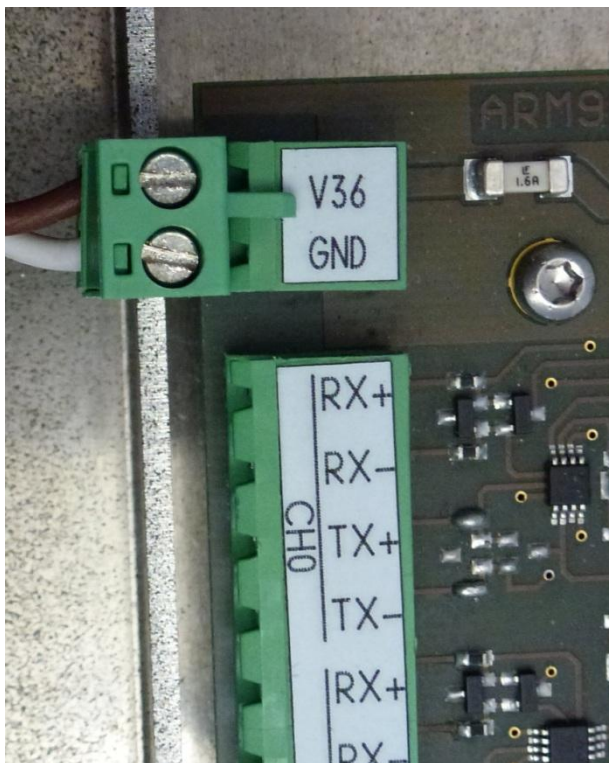
7.3.2 Connection between control unit / Basis Measuring Board
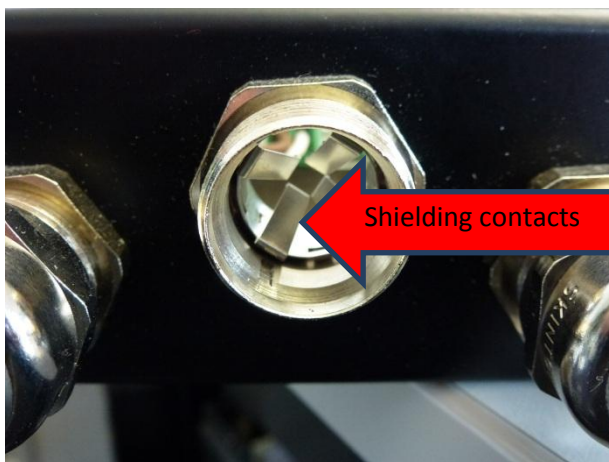
Connect the long cable part of the connection cable with the Control unit.

Make sure that the shielding of the cable is in contact with shielding contacts of the cable entry.
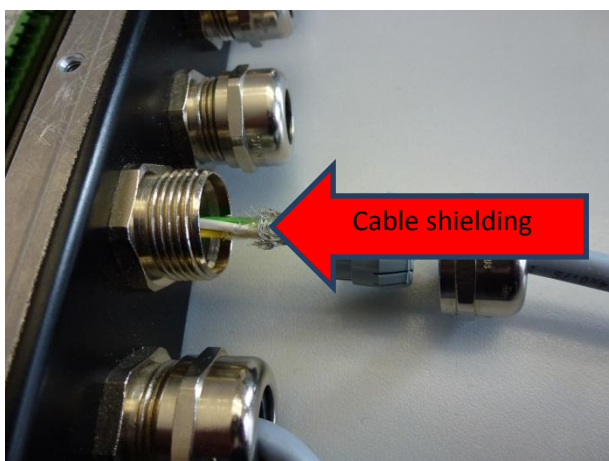
Connect the cable in this way through the cable entry of the Control unit.
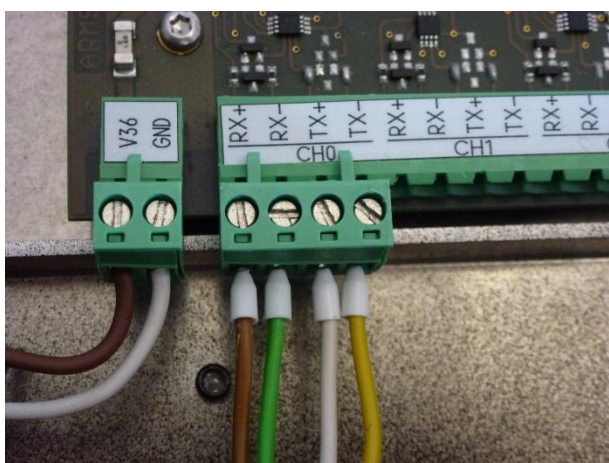
Connect the long cable end with the plugs in such a way, as you can see it on the photo.
Than plug it on "CH0" for the first Base Measuring Board.

Repeat this for each Base Measuring board.
CH1 for the second etc..

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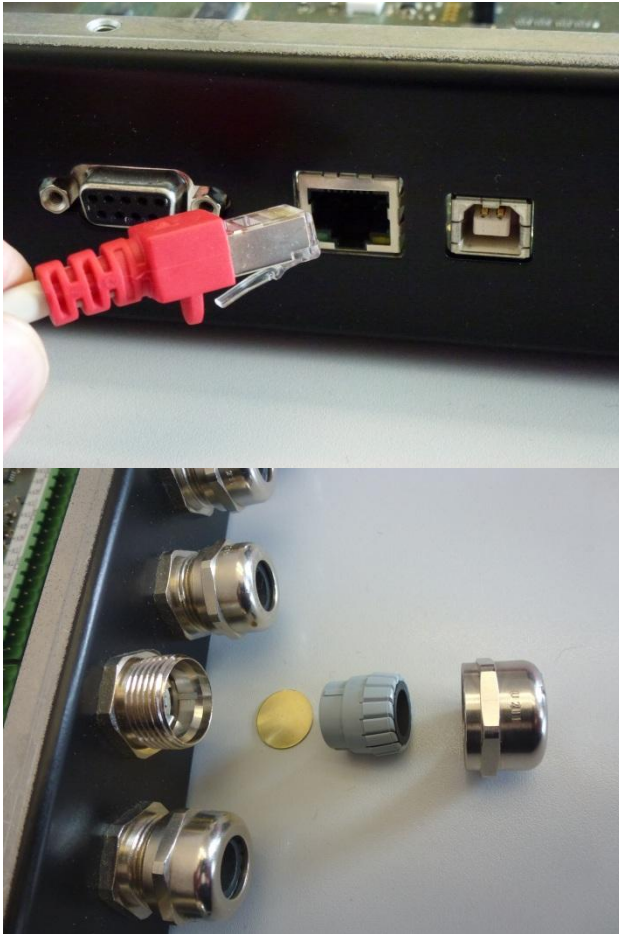
Connect the Control unit with the Touch screen Monitor via Ethernet cable.
The Ethernet cable is part of the delivery of the Control unit.

Please close all cable entries which are not in use with the delivered brass plates.

7.4   Monitor

The Monitor has an extra separate Operation Manual

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7.5   Measuring Card

7.5.1 Insert of the card

The cards have to be connected between the two white card holders. Press it carefully in the end position and lock the blue bottoms.

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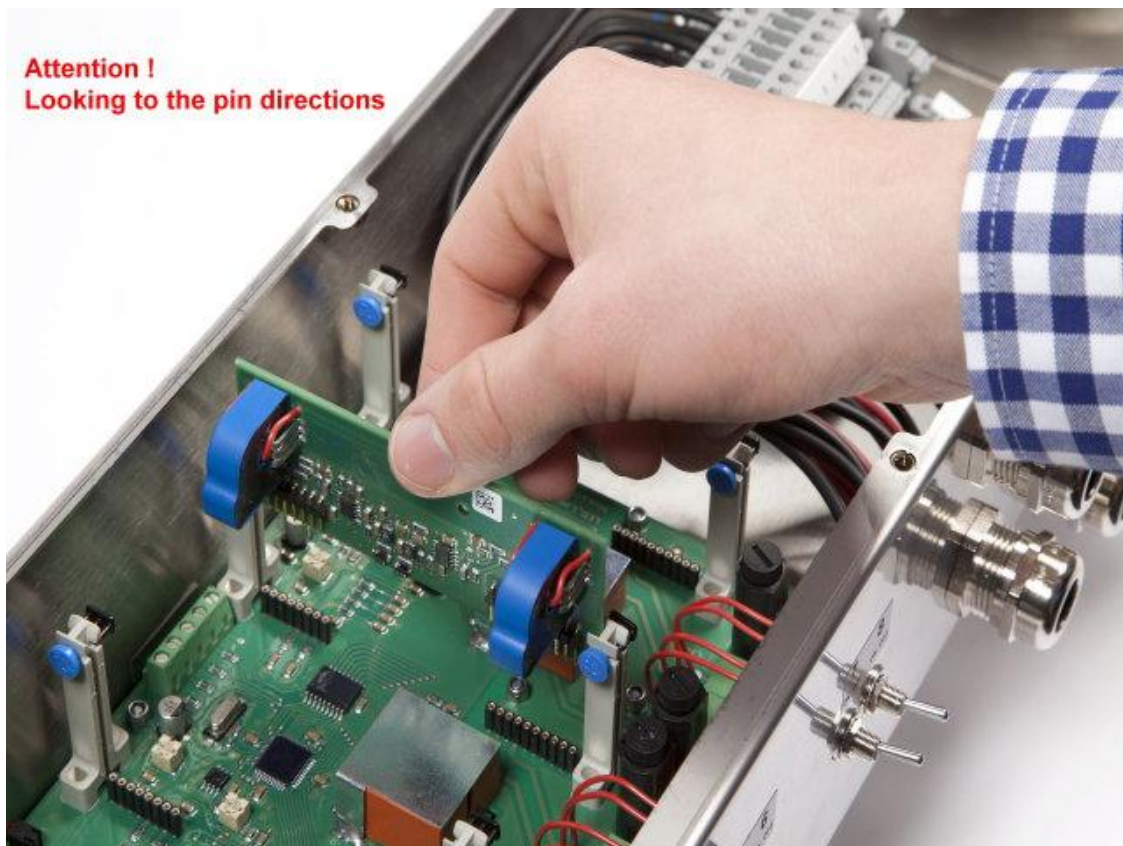
7.5.2 Locking the card

After the insert of the Measuring card you have to lock the lock bolt. Then the card is not able to fall out of the board.

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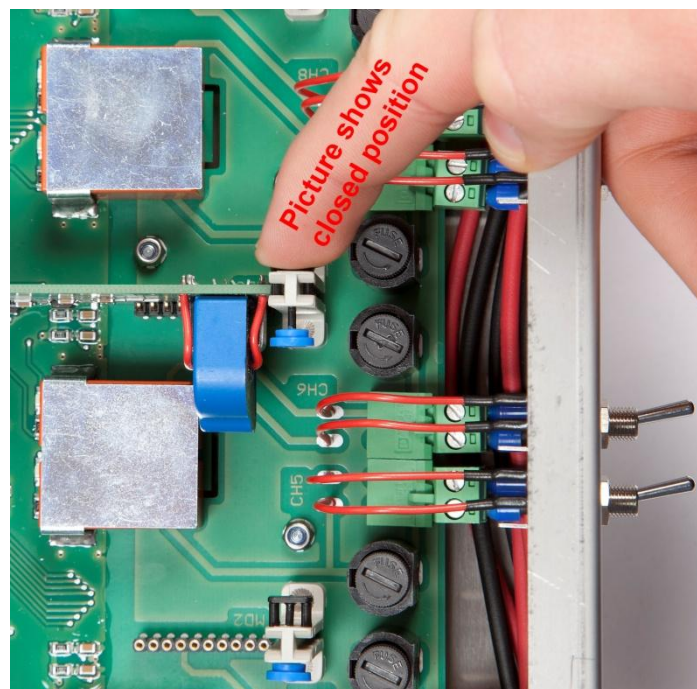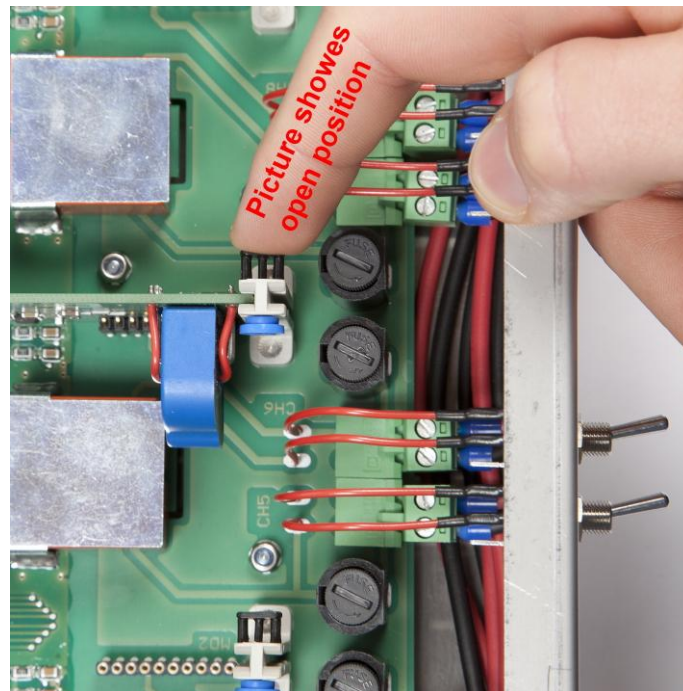
7.6 Basis Measuring Module - Connection Table

Module 1 – Voltage 24V

		Lantern Type or Electrical item
Ch1	1.0	Port
Ch2	1.1	Starboard
Ch3	1.2	Towing Masthead 1
Ch4	1.3	Towing Masthead 2
Ch5	1.4	Mast forward
Ch6	1.5	Stern
Ch7	1.6	Towing Light aft
Ch8	1.7	Anchor

Module 2 – Voltage 24V

		Lantern Type or Electrical item
Ch1	2.0	NUC upper SSb
Ch2	2.1	NUC upper SBb
Ch3	2.2	RIAM Light SSb
Ch4	2.3	RIAM Light SBb
Ch5	2.4	NUC lower SSb
Ch6	2.5	NUC lower SBb
Ch7	2.6	
Ch8	2.7	

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Modul 3 – Voltage 230V

		Lantern Type or Electrical item
Ch1	3.0	
Ch2	3.1	
Ch3	3.2	
Ch4	3.3	
Ch5	3.4	
Ch6	3.5	
Ch7	3.6	
Ch8	3.7	

Modul 4 – Voltage 230V

		Lantern Type or Electrical item
Ch1	4.0	
Ch2	4.1	
Ch3	4.2	
Ch4	4.3	
Ch5	4.4	
Ch6	4.5	
Ch7	4.6	
Ch8	4.7	

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Modul 5 – Voltage 230V

		Lantern Type or Electrical item
Ch1	5.0	
Ch2	5.1	
Ch3	5.2	
Ch4	5.3	
Ch5	5.4	
Ch6	5.5	
Ch7	5.6	
Ch8	5.7	

Modul 6 – Voltage ??

		Lantern Type or Electrical item
Ch1	6.0	
Ch2	6.1	
Ch3	6.2	
Ch4	6.3	
Ch5	6.4	
Ch6	6.5	
Ch7	6.6	
Ch8	6.7	

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Modul 7 – Voltage ??

		Lantern Type or Electrical item
Ch1	7.0	
Ch2	7.1	
Ch3	7.2	
Ch4	7.3	
Ch5	7.4	
Ch6	7.5	
Ch7	7.6	
Ch8	7.7	

Modul 8 – Voltage ??

		Lantern Type or Electrical item
Ch1	8.0	
Ch2	8.1	
Ch3	8.2	
Ch4	8.3	
Ch5	8.4	
Ch6	8.5	
Ch7	8.6	
Ch8	8.7	

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8. Start the system

8.1 Start the system normal

To start the system you have to push the Start button.

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8.2   Start the system for OS Administration Area

You will see following screen.
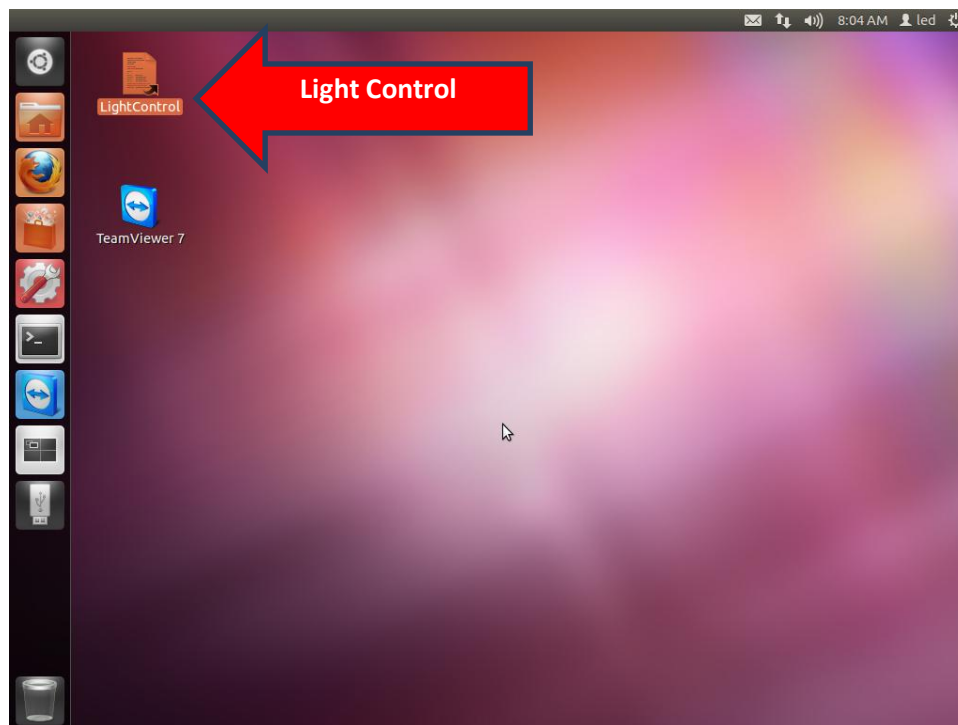
With a double click on the "Lightscontrol.sh" you will start the program.
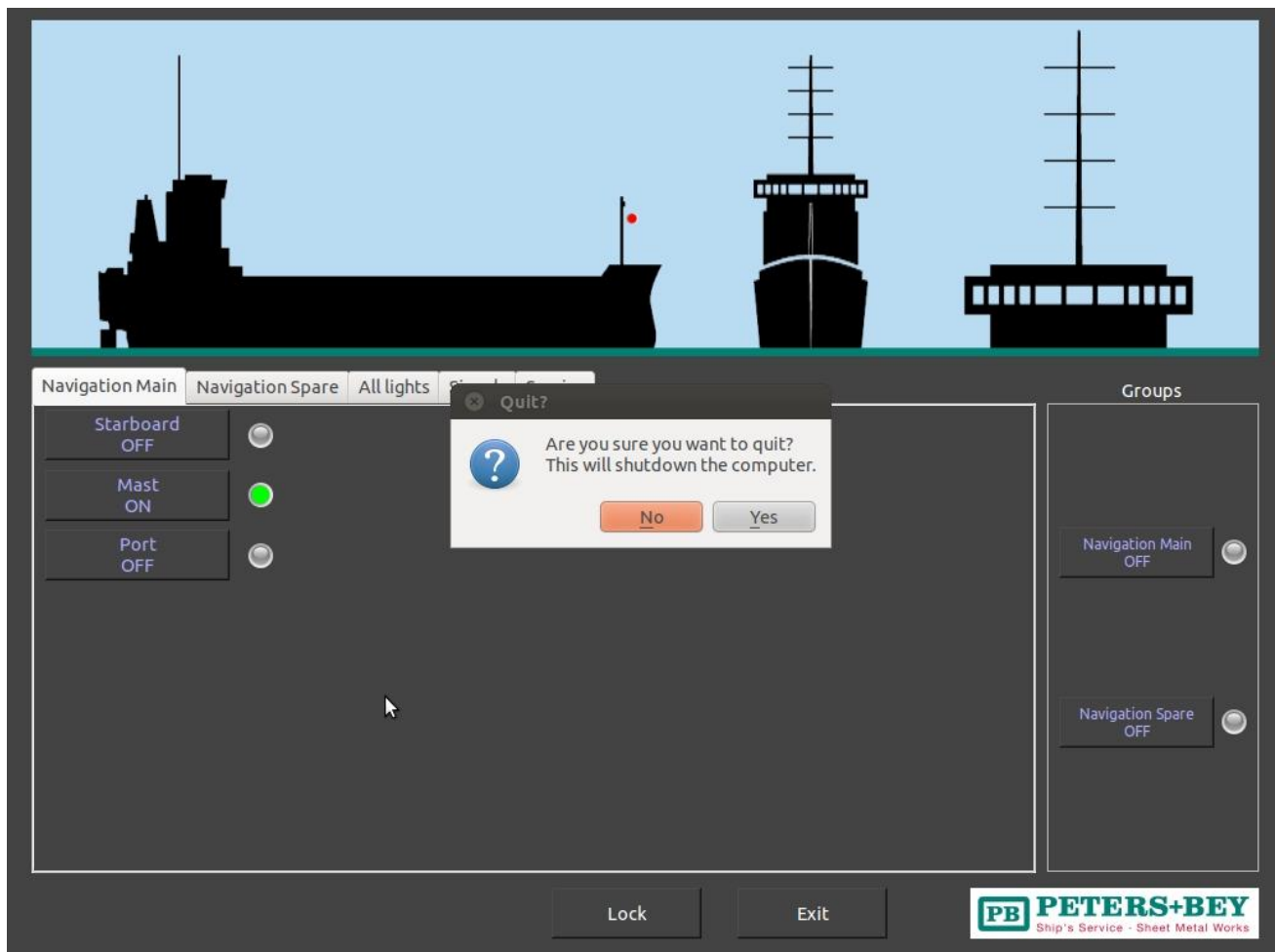

You have to press the push bottom   **Ausführen**

_____
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9. Shut down the system

To shut down the system you have to push the [**Exit**] push button.
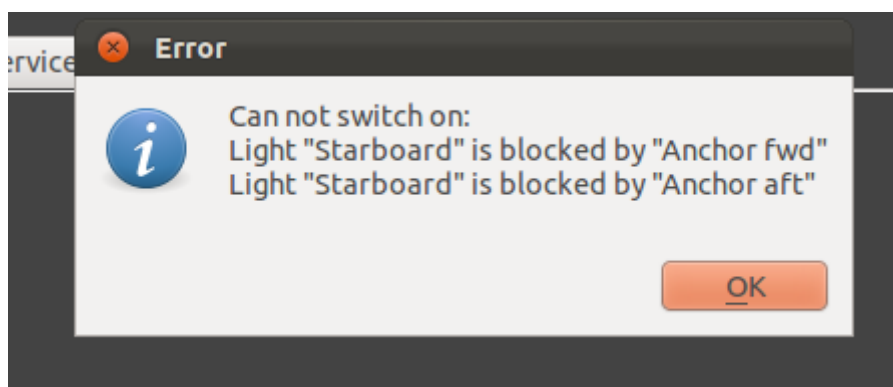
Following screen you will see:

Now you have to select Yes or No.

_____

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10. Error

10.1 Blocking Error

This Error comes if you try to turn on a light / group which is blocked through the blocking mode.

To quit the Error you have to press the push bottom **OK**

To solve this problem you have to change the programming of the group / controls via the service mode.

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10.2 Error Code 6

This Error Code 6 comes up, if one of the lights exhibits an error.

If one light is not working correctly it will take 30 seconds before you get the alarm.

Following will be shown on the screen:
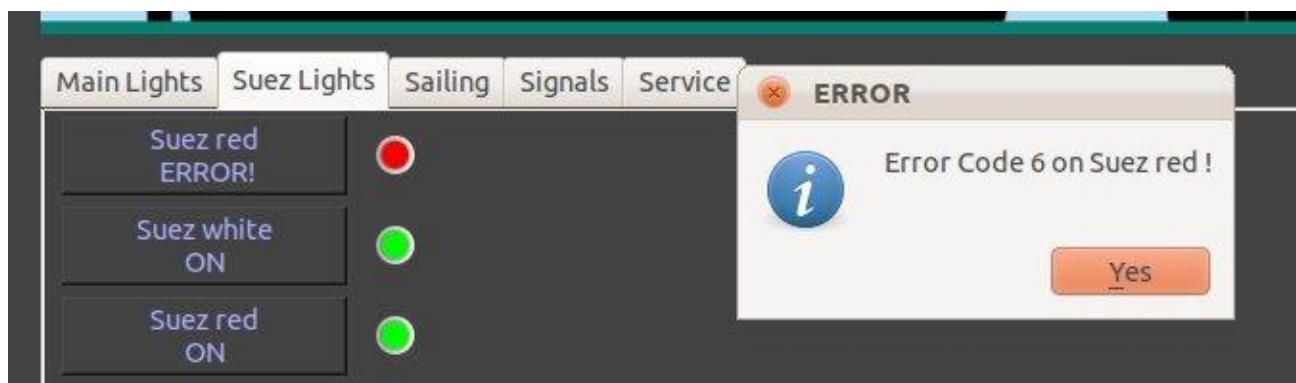
This Error Code 6 shows which light is not working properly.

The error can have the following reasons:

- Bulb is burned
- Cable to the light is damages
- Wrong wiring
- The LED Light has the wrong Minimum / Maximum Value
- No electricity
- Measuring card could be damaged

To quit the buzzer you have to press the push bottom **Yes**

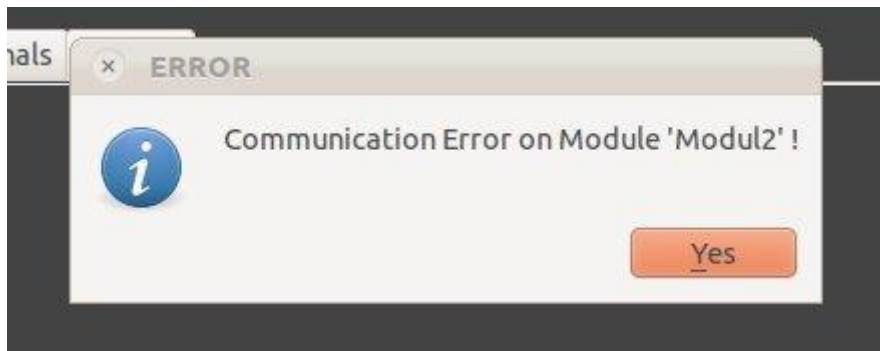To quit the Error you have to press the push bottom a second time **Yes**

The red point and the "ERROR" will stay until you solve the problem.

To check the light you could use the toggle switch. If the light run properly the measuring card will be damaged. Change the card.

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10.3 Communication Error

This error comes if one of the Modules is not working properly.

If one Module is not working correctly it will take 30 seconds before you get the alarm.

This Communication Error shows which Module is not working properly.

The error can have the following reasons:

- Cable to the Module is damages
- Wrong wiring
- No electricity

To quit the buzzer you have to press the push bottom **Yes**
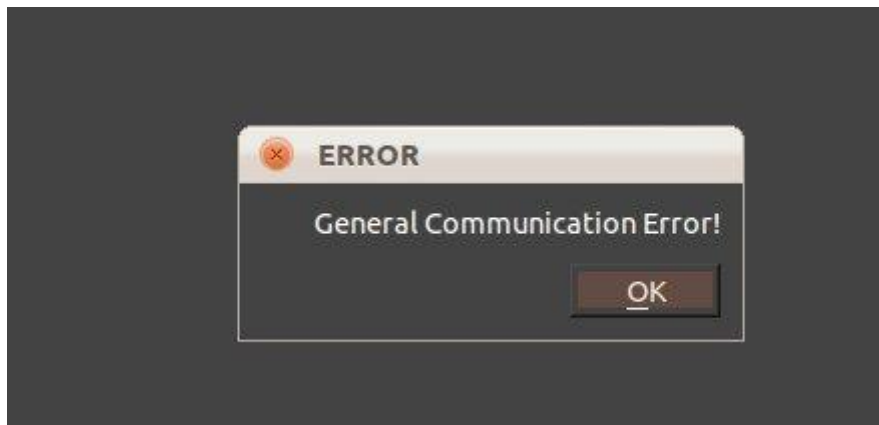
To quit the Error you have to press the push bottom a second time **Yes**

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10.4 General Communication Error

This error comes if the Basic Module is not working properly.

If the Basic Module is not working correctly it will take 60 seconds before you get the alarm.

The error can have the following reasons:

- Cable to the Module is damages
- Wrong wiring
- No electricity
- Network error

To quit the buzzer you have to press the push bottom **Yes**

To quit the Error you have to press the push bottom a second time **Yes**

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10.5 Alerts

With this bottom you are able to get a list of all existing error in the system, which are not solved.

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